

AMENDMENT NO. _____ Calendar No. _____

Purpose: To revise the provision regarding reauthorizing the
Tsunami Warning and Education Act.

IN THE SENATE OF THE UNITED STATES—119th Cong., 2d Sess.

S. 3923

To improve the weather research of the National Oceanic
and Atmospheric Administration, support improvements
in weather forecasting and prediction, and expand com-
mercial opportunities for the provision of weather data.

Referred to the Committee on _____ and
ordered to be printed

Ordered to lie on the table and to be printed

AMENDMENTS intended to be proposed by Mr. SULLIVAN
(for himself and Ms. CANTWELL)

Viz:

1 On page 17, line 22, strike “(a) TITLE HEADING.—
2 The Tsunami” and insert the following:

3 (a) TITLE HEADING; DEFINITIONS.—

4 (1) TITLE HEADING.—The Tsunami

5 On page 18, between lines 2 and 3, insert the fol-
6 lowing:

7 (2) DEFINITIONS.—Section 802 of the Tsunami
8 Warning and Education Act (33 U.S.C. 3201) is
9 amended by adding at the end the following:

1 “(3) The term ‘Indian Tribe’ has the meaning
2 given the term in section 4 of the Indian Self-Deter-
3 mination and Education Assistance Act (25 U.S.C.
4 5304).

5 “(4) The term ‘Native Hawaiian organization’
6 has the meaning given the term in section 6207 of
7 the Elementary and Secondary Education Act of
8 1965 (20 U.S.C. 7517), except that the term in-
9 cludes the Department of Hawaiian Home Lands
10 and the Office of Hawaiian Affairs.

11 “(5) The term ‘Tribal organization’ has the
12 meaning given the term in section 4 of the Indian
13 Self-Determination and Education Assistance Act.

14 “(6) The term ‘tsunami’ means a series of
15 waves that is caused by a tsunamigenic event.

16 “(7) The term ‘tsunamigenic event’ means any
17 event, such as an earthquake, volcanic eruption, sub-
18 marine landslide, coastal rockfall, or other event,
19 with the magnitude to cause a tsunami.”.

20 On page 18, strike lines 9 and 10 and insert the fol-
21 lowing:

22 (3) by amending paragraph (8) to read as fol-
23 lows:

1 “(8) to improve coordination for detection,
2 warnings, and outreach for tsunami and other coast-
3 al impacts with Federal, State, and international
4 partners, and Indian Tribes, Tribal organizations,
5 and Native Hawaiian organizations; and”;

6 On page 18, strike lines 20 through 24 and insert
7 the following:

8 (1) in subsection (a), by striking “the Pacific
9 and Arctic Ocean regions and for the Atlantic Ocean
10 region, including the Caribbean Sea and the Gulf of
11 Mexico” and inserting “the United States and its
12 territories”;

13 (2) in subsection (b)—

14 (A) in paragraph (1), by striking “sub-
15 section (d)” and inserting “subsection (e)”;

16 (B) in paragraph (2), by inserting “, or a
17 successor system,” after “buoy array”;

18 (C) in paragraph (4), by inserting “, using
19 industry and scientific best practices,” after
20 “operational condition”; and

21 (D) in paragraph (5)—

22 On page 19, strike lines 4 through 6 and insert the
23 following:

1 (ii) by redesignating subparagraphs
2 (D) through (F) and subparagraph (G) as
3 subparagraphs (E) through (G) and sub-
4 paragraph (I), respectively;

5 On page 19, between lines 10 and 11, insert the fol-
6 lowing:

7 (iv) in subparagraph (G), as so redesi-
8 gnated, by striking “; and” and inserting
9 a semicolon; and

10 (v) by inserting after subparagraph
11 (G), as so redesignated, the following:

12 “(H) tidal gauges, water level gauges, and
13 buoys; and”;

14 On page 19, on line 11, strike “(C)” and insert
15 “(E)”, and on line 20, strike “(D)” and insert “(F)”.

16 On page 19, beginning on line 14, strike “, support
17 data” and all that follows through “Code” on line 19 and
18 insert “support data and metadata access and archiving”.

19 On page 20, between lines 9 and 10, insert the fol-
20 lowing:

1 (iii) by amending subparagraph (B) to
2 read as follows:

3 “(B) support operators of seismic stations
4 installed before the date of enactment of the
5 Weather Research and Forecasting Innovation
6 Reauthorization Act of 2026 that supplement
7 coverage areas of sparse instrumentation, with
8 a focus on the most seismically active States
9 and on stations with multi-State benefits;” and

10 On page 20, line 10, strike “(iii)” and insert “(iv)”.

11 On page 20, strike lines 12 through 25 and insert
12 the following:

13 “(C) provide support for the global naviga-
14 tion satellite system network data streams from
15 such agencies, and supplement instrumentation
16 coverage for rapid earthquake assessment; and

17 “(D) assess the data and information of
18 such agencies for potential use in the Adminis-
19 tration’s warning system;”;

20 On page 21, strike lines 1 through 9, and insert the
21 following:

1 (G) by redesignating paragraphs (8)
2 through (10) as paragraphs (9) through (11),
3 respectively;

4 (H) by inserting after paragraph (7) the
5 following:

6 “(8) include a cooperative effort between the
7 Administration and the United States Geological
8 Survey to assess additional methods of rapid delivery
9 for tsunami notifications and warnings, including via
10 the Earthquake Early Warning System of the
11 United States Geological Survey;”;

12 On page 21, strike lines 10 through 21 and insert
13 the following:

14 (I) in paragraph (9), as so redesignated—

15 (i) by striking “graphical warning
16 products, to at-risk States, territories, and
17 tsunami communities” and inserting
18 “graphical warning products and decision
19 support tools, to communities at risk of
20 tsunami”; and

21 (ii) by striking “utilization” and in-
22 serting “use”;

23 (J) in paragraph (10), as so redesignated,
24 by striking “and” after the semicolon;

1 (K) in paragraph (11), as so redesignated,
2 by striking the period and inserting “; and”;
3 and

4 (L) by adding at the end the following:
5 “(12) update inundation maps, models,

6 On page 22, strike lines 4 through 15 and insert the
7 following:

8 (B) by amending paragraph (1), as so re-
9 designated, to read as follows:

10 “(1) is capable of forecasting and providing
11 adequate warnings, including tsunami arrival time,
12 alert levels, and inundation models where applicable,
13 for the United States and its territories; and”;

14 On page 22, beginning on line 22, strike “The Ad-
15 ministrator” and all that follows through “shall—” on line
16 24 and insert “Not later than 1 year after the date of
17 enactment of the Weather Research and Forecasting Inno-
18 vation Reauthorization Act of 2026, the Administrator, in
19 collaboration with social scientists, Federal, State, and
20 local emergency personnel, Indian Tribes, Tribal organiza-
21 tions, Native Hawaiian organizations, and high-risk com-
22 munities, shall—”.

1 On page 23, line 5, strike “and”.

2 On page 23, line 7, strike “.”;” and insert “; and”.

3 On page 23, between lines 7 and 8, insert the fol-
4 lowing:

5 “(4) provide to the Committee on Commerce,
6 Science, and Transportation of the Senate and the
7 Committee on Science, Space, and Technology of the
8 House of Representatives a briefing on the activities
9 under this subsection.”.

10 On page 23, strike lines 10 through 15 and insert
11 the following:

12 (i) in the matter preceding subpara-
13 graph (A), by striking “Centers shall” and
14 inserting “centers shall”;

15 On page 24, line 2, strike “current,” and insert “cur-
16 rent, surface and ground water level,”.

17 On page 24, strike lines 3 through 5 and insert the
18 following:

19 (ii) by amending subparagraph (B) to
20 read as follows:

1 “(B) Evaluating tsunamigenic sources.”;

2 On page 24, strike lines 14 through 21 and insert
3 the following:

4 (v) in subparagraph (F), by striking
5 “Federal, State, tribal, and local govern-
6 ment officials” and inserting “Federal,
7 State, and local government officials, In-
8 dian Tribes, Tribal organizations, Native
9 Hawaiian organizations,”;

10 (vi) by redesignating subparagraphs
11 (G) and (H) and subparagraphs (I) and
12 (J) as subparagraphs (H) and (I) and sub-
13 paragraphs (K) and (L), respectively;

14 (vii) by inserting after subparagraph
15 (F) the following:

16 “(G) Providing a Tsunami Warning Coordi-
17 nator at each center supported or maintained
18 under paragraph (1) to coordinate with part-
19 ners and stakeholders on products and services
20 provided by each such center.”;

21 (viii) in subparagraph (I), as so redesi-
22 gnated, by inserting “monitoring needs,”
23 after “response,”; and

1 (ix) by inserting after subparagraph
2 (I), as so redesignated, the following:

3 “(J) Updating, as appropriate, forecast
4 points, breakpoints, and special procedure
5 areas.”; and

6 (x) by adding at the end the following:

7 “(M) Conducting, not less than annually, a
8 tsunami warning drill with Federal, State, and
9 local emergency managers, and emergency man-
10 agers of Indian Tribes, Tribal organizations,
11 and Native Hawaiian organizations.”.

12 Beginning on page 24, strike line 24 and all that fol-
13 lows through line 4 on page 25 and insert the following:

14 “(3) FAIL-SAFE WARNING CAPABILITY.—

15 “(A) IN GENERAL.—The Administrator
16 shall support and maintain fail-safe warning ca-
17 pability for the tsunami warning centers sup-
18 ported or maintained under paragraph (1).

19 “(B) SERVICE BACK-UP DRILLS.—Not less
20 than biannually, such centers shall conduct a
21 service back-up drill to ensure they are able to
22 perform back-up duties for each other.”;

1 On page 26, strike lines 8 through 18 and insert the
2 following:

3 (ii) in subparagraph (B), by redesignating clauses (i) through (iii) as subclauses (I) through (III), respectively, and
4 adjusting the margins accordingly;
5

6 (iii) in subparagraph (C), by redesignating clauses (i) and (ii) as subclauses (I) and (II), respectively, and adjusting the
7 margins accordingly;
8

9 (iv) by redesignating subparagraphs (A) through (E) as clauses (i) through (v),
10 respectively, and adjusting the margins accordingly;
11

12 (v) by striking “The Administrator”
13 and inserting the following:
14

15 “(A) IN GENERAL.—The Administrator”;

16 (vi) in clause (i), as so redesignated,
17 by striking “uniform” and inserting
18 “standardized”;
19

20 (vii) in clause (iii)(II), as so redesignated, by striking “uniform” and inserting
21 “standardized”;
22
23

1 (viii) in clause (iv), as so redesignig-
2 nated, by striking “; and” and inserting a
3 semicolon;

4 (ix) in clause (v), as so redesignated,
5 by striking the period and inserting “;
6 and”; and

7 (x) by adding after clause (v), as so
8 redesignated, the following:

9 On page 26, line 19, strike “(F) align” and insert
10 the following:

11 “(vi) align

12 On page 26, line 22, strike “seamless”.

13 On page 26, line 25, strike “(i) replacing” and insert
14 the following:

15 “(I) replacing

16 On page 27, line 1, strike “(ii) ensuring” and insert
17 the following:

18 “(II) ensuring

19 On page 27, line 2, strike “(iii) enabling” and the
20 following:

1 “(III) enabling

2 On page 27, line 4, strike “(iv) mitigating” and insert
3 the following:

4 “(IV) mitigating

5 On page 27, line 6, strike “(v) meeting” and insert
6 the following:

7 “(V) meeting

8 On page 27, between lines 8 and 9, insert the fol-
9 lowing:

10 (xi) by adding at the end the
11 following:

12 “(B) REGIONAL DIFFERENCES.—Notwith-
13 standing subparagraph (A), the Administrator
14 shall allow for regional differences with respect
15 to the communication methods and decision
16 support tools used by the centers supported or
17 maintained under paragraph (1) in order to
18 meet the unique needs of the community served
19 by such centers.”;

20 On page 27, line 9, strike “(F) by adding” and insert
21 the following:

1 (F) in paragraph (6), in the first sentence,
2 by inserting “, including personnel,” after “re-
3 sources”; and

4 (G) by adding

5 On page 27, lines 12 and 13, strike “until such time
6 as all relevant requirements have been satisfied” and in-
7 sert “for 3 years”.

8 On page 27, lines 17 and 18, strike “an update brief-
9 ing on the progress” and insert “an update in person or
10 in writing on the progress and expected timelines”.

11 On page 28, line 1, strike “Information” and insert
12 “Interactive”.

13 On page 28, strike lines 3 through 8 and insert the
14 following:

15 “(C) Any structural reorganization efforts
16 as may be necessary following the enactment of
17 the Weather Research and Forecasting Innova-
18 tion Reauthorization Act of 2026.

19 “(D) Such centers conducting drills re-
20 quired under paragraphs (2)(M) and (3)(B).”.

1 On page 28, strike lines 21 to 24.

2 On page 29, strike lines 1 through 3.

3 On page 29, strike lines 4 through 7, and insert the
4 following:

5 (7) in subsection (h)(2), as so redesignated—

6 (A) in subparagraph (A), by striking “ac-
7 curacy of the tsunami model used” and insert-
8 ing “accuracy and timeliness of the tsunami
9 model and forecast used”; and

10 (B) in subparagraph (C)—

11 (i) by inserting “and timeliness” after
12 “effectiveness”; and

13 (ii) by striking “local, and tribal part-
14 ners” and inserting “and local partners,
15 Indian Tribes, Tribal organizations, and
16 Native Hawaiian organizations”.

17 On page 34, lines 9 and 10, strike “(c)” each place
18 it appears.

19 On page 34, strike lines 11 through 16 and insert
20 the following:

21 (1) in subsection (b)—

1 (A) in the matter preceding paragraph

2 (1)—

3 (i) by inserting “and maintain” after
4 “establish” each place it appears; and

5 (ii) by striking “Federal, State, local,
6 and tribal government officials” and in-
7 serting “Federal, State, local, and Tribal
8 government officials and representatives of
9 Native Hawaiian organizations”; and

10 (B) in paragraph (3), by inserting before
11 the semicolon “, such as vertical evacuation
12 structures, sirens, and other potentially life-sav-
13 ing measures to ensure that communities des-
14 igned as TsunamiReady have sufficient tsu-
15 nami response options”;

16 (2) in subsection (c)—

17 (A) in paragraph (1), by striking “tribes,”
18 and inserting “Indian Tribes, Tribal organiza-
19 tions, Native Hawaiian organizations,”;

20 (B) in paragraph (4), by striking “tribal,
21 and local governments” and inserting “and
22 local governments, Indian Tribes, Tribal organi-
23 zations, Native Hawaiian organizations,”;

24 (C) in paragraph (5)—

17

1 (i) in subparagraph (A), by striking
2 “in the region, including paleotsunami
3 data” and inserting “and tsunamigenic
4 events in the region”;

5 (ii) by redesignating subparagraph
6 (B) and subparagraphs (C) through (G) as
7 subparagraph (C) and subparagraphs (E)
8 through (I), respectively;

9 (iii) by inserting after subparagraph
10 (A) the following:

11 On page 34, line 19, strike “and” and insert the fol-
12 lowing:

13 (iv) by inserting after subparagraph
14 (C), as so redesignated, the following:

15 “(D) Probabilistic tsunami hazard analysis
16 maps.”; and

17 On page 34, on line 21, strike “(I)” and insert “(J)”
18 and on line 24, strike “(J)” and insert “(K)”.

19 On page 35, strike lines 4 through 10 and insert the
20 following:

21 “(L) High-resolution and high-quality dig-
22 ital elevation models needed for at-risk water-

1 ways, ports, and harbors, particularly for re-
2 gions with outdated or low-quality data, not
3 covered by existing inundation maps, or identi-
4 fied as a priority by the Administrator.”;

5 (D) in paragraph (7)—

6 (i) in subparagraph (C), by inserting
7 “and behavioral” after “social”; and

8 (ii) by adding at the end the fol-
9 lowing:

10 “(E) The development and regular mainte-
11 nance of a user-friendly repository of inunda-
12 tion and evacuation maps and evacuation map-
13 ping guidelines for States, local governments,
14 Indian Tribes, Tribal organizations, and Native
15 Hawaiian organizations on the website of the
16 program conducted under subsection (a).

17 “(F) Coordination with tsunami-prone,
18 rural communities to enhance emergency plan-
19 ning and response efforts, including through the
20 TsunamiReady program.”; and

21 (E) in paragraph (8)(A)—

22 (i) by redesignating clauses (ii) and
23 (iii) as clauses (iii) and (iv), respectively;
24 and

1 (ii) by inserting after clause (i) the
2 following:

3 “(ii) tsunami source parameters;”;

4 (3) in subsection (d)—

5 (A) in paragraph (3), by striking “tribal”
6 and inserting “Tribal”; and

7 (B) in paragraph (6), by striking “tribal,
8 and territorial governments and agencies,” and
9 inserting “and territorial governments and
10 agencies, Indian Tribes, Tribal organizations,
11 Native Hawaiian organizations,”; and

12 (4) in subsection (e), by striking “tribes,” and
13 inserting “Indian Tribes, Tribal organizations, Na-
14 tive Hawaiian organizations,”.

15 On page 35, between lines 14 and 15, insert the fol-
16 lowing:

17 (A) by striking “State, tribal, and terri-
18 torial governments, and academic institutions”
19 and inserting “State and territorial govern-
20 ments, Indian Tribes, Tribal organizations, Na-
21 tive Hawaiian organizations, and academic in-
22 stitutions (including Tribal Colleges or Univer-
23 sities)”;

1 On page 35, on line 15, strike “(A)” and insert “(B)”
2 and on line 17, strike “(B)” and insert “(C)”.

3 On page 35, lines 24 and 25, strike “, including data
4 collection,”.

5 On page 36, strike lines 7 through 9 and insert the
6 following:

7 “(5) develop and maintain a data portal for ad-
8 vancing research and model development;

9 “(6) develop decision support tools; and”; and

10 On page 36, line 14, insert “until 2035” after “there-
11 after”.

12 Beginning on page 36, strike line 21 and all that fol-
13 lows through line 2 on page 37 and insert the following:

14 “(2) identifies key research needs for better de-
15 tecting and forecasting tsunamis impacting the
16 United States and its territories;

17 On page 37, line 13, insert “State and local govern-
18 ments, Indian Tribes, Tribal organizations, Native Hawai-
19 ian organizations,” after “Agency,”.

1 On page 37, strike lines 16 through 19 and insert
2 the following:

3 (g) GLOBAL TSUNAMI WARNING AND MITIGATION
4 NETWORK.—Section 807 of the Tsunami Warning and
5 Education Act (33 U.S.C. 3206) is amended—

6 (1) in subsection (b)—

7 (A) in the matter preceding paragraph (1),
8 by striking “Pacific Ocean nations participating
9 in the International Tsunami Warning System
10 of the Pacific,” and inserting “Pacific Ocean
11 and Caribbean Sea nations participating in the
12 International Tsunami Warning and Mitigation
13 System,”;

14 (B) in paragraph (2), by striking “national
15 warning systems, and make information” and
16 inserting “, maintaining, and strengthening the
17 capacities of their national warning systems, by
18 making information”;

19 (C) by redesignating paragraphs (3) and
20 (4) as paragraphs (4) and (5), respectively;

21 (D) by inserting after paragraph (2) the
22 following:

23 “(3) provide decision support services and im-
24 prove preparedness and tsunami readiness through
25 exercises and drills, outreach, training, and capacity

1 development of national tsunami warning centers
2 and disaster and emergency management agencies;”;

3 (E) in paragraph (4), as so redesignated—

4 (i) by striking “maintain a library of
5 materials” and inserting “serve as an in-
6 formation source”; and

7 (ii) by striking “tsunami in general”
8 and inserting “tsunamis and tsunami haz-
9 ard-related risks to the public”; and

10 (F) in paragraph (5), as so redesignated,
11 by inserting “, tools,” after “materials”; and

12 (2) in subsection (d), by inserting “and man-
13 agement” after “data sharing”.

14 On page 38, strike lines 5 through 8 and insert the
15 following:

16 (i) ANNUAL NOTIFICATIONS; GOVERNMENT-TO-GOV-
17 ERNMENT CONSULTATION WITH INDIAN TRIBES.—

18 (1) IN GENERAL.—The Tsunami Warning and
19 Education Act (33 U.S.C. 3201 et seq.) is amend-
20 ed—

21 (A) by redesignating section 809 as section
22 811; and

23 (B) by inserting after section 808 the fol-
24 lowing:

1 **“SEC. 809. ANNUAL NOTIFICATIONS.**

2 “Not later than September 30 of each fiscal year
3 until fiscal year 2030, the Administrator shall provide the
4 Committee on Commerce, Science, and Transportation of
5 the Senate, the Committee on Appropriations of the Sen-
6 ate, the Committee on Science, Space, and Technology of
7 the House of Representatives, and the Committee on Ap-
8 propriations of the House of Representatives a notification
9 with an accounting of funds spent in such fiscal year for
10 the programs authorized under this title, that includes—

11 “(1) the amount of funds allocated for the tsu-
12 nami hazard mitigation program under section 805;
13 and

14 “(2) the amount of funds allocated for the tsu-
15 nami research program under section 806.

16 **“SEC. 810. GOVERNMENT-TO-GOVERNMENT CONSULTATION**
17 **WITH INDIAN TRIBES.**

18 “The Administrator shall conduct government-to-gov-
19 ernment consultation with Indian Tribes in implementing
20 this title.”.

21 (2) TABLE OF CONTENTS AMENDMENT.—The
22 table of contents in section 1(b) of the Magnuson-
23 Stevens Fishery Conservation and Management Re-
24 authorization Act of 2006 (Public Law 109–479;
25 120 Stat. 3575) is amended by striking the item re-
26 lating to section 809 and inserting the following:

“Sec. 809. Annual notifications.

“Sec. 810. Government-to-government consultation with Indian Tribes.

“Sec. 811. Authorization of appropriations.”.

1 (j) AUTHORIZATION OF APPROPRIATIONS.—Section
2 811 of the Tsunami Warning and Education Act, as so
3 redesignated, is amended to read as follows:

4 **“SEC. 811. AUTHORIZATION OF APPROPRIATIONS.”.**

5 On page 38, line 11, strike “2026” and insert
6 “2027”.

7 On page 38, between lines 19 and 20, insert the fol-
8 lowing:

9 (k) USE OF IPAWS TO DELIVER TSUNAMI
10 ALERTS.—

11 (1) IN GENERAL.—The Administrator, in con-
12 sultation with the Administrator of the Federal
13 Emergency Management Agency and the Federal
14 Communications Commission, shall clarify and docu-
15 ment the responsibilities and decision-making proc-
16 esses of the Administration, the Federal Emergency
17 Management Agency, and the Federal Communica-
18 tions Commission with respect to the use of the In-
19 tegrated Public Alert and Warning System to deliver
20 tsunami alerts to the Emergency Alert System and
21 the Wireless Emergency Alerts system.

1 (2) MEMORANDUM OF UNDERSTANDING.—Not
2 later than 180 days after the date of enactment of
3 this Act, the Administrator shall—

4 (A) update its memorandum of under-
5 standing with the Federal Emergency Manage-
6 ment Agency and the Federal Communications
7 Commission to reflect the responsibilities and
8 processes clarified under paragraph (1); and

9 (B) provide the Committee on Commerce,
10 Science, and Transportation of the Senate and
11 the Committee on Science, Space, and Tech-
12 nology of the House of Representatives with a
13 copy of such updated memorandum of under-
14 standing.

15 (1) OUTREACH RESPONSIBILITIES.—Section 511 of
16 the Weather Research and Forecasting Innovation Act of
17 2017 (33 U.S.C. 3208) is amended—

18 (1) in the matter preceding paragraph (1), by
19 inserting “and Indian Tribes, Tribal organizations,
20 and Native Hawaiian organizations (for purposes of
21 this section, as such terms are defined in section
22 802 of the Tsunami Warning and Education Act (33
23 U.S.C. 3201))” after “managers”; and

24 (2) in paragraph (1), by striking “and emer-
25 gency managers” and inserting “, emergency man-

1 agers, Indian Tribes, Tribal organizations, and Na-
2 tive Hawaiian organizations”.

3 (m) REPORT ON CERTAIN TSUNAMI THREATS.—

4 (1) DEFINITIONS.— In this subsection:

5 (A) COVERED EVENT.—The term “covered
6 event” means a tsunami or combined earth-
7 quake and tsunami event that impacts the
8 United States.

9 (B) CRITICAL INFRASTRUCTURE.—The
10 term “critical infrastructure” has the meaning
11 given such term in subsection (e) of the Critical
12 Infrastructures Protection Act of 2001 (42
13 U.S.C. 5195e).

14 (2) REPORT.—

15 (A) IN GENERAL.—Not later than 18
16 months after the date of enactment of this Act,
17 the Comptroller General of the United States,
18 in consultation with the entities described in
19 paragraph (3), shall produce a report on how
20 the United States should prepare for, mitigate
21 against, respond to, and recover from each of
22 the following types of covered events:

23 (i) A covered event in the Cascadia
24 Subduction Zone.

1 (ii) A covered event that impacts
2 Alaska, including in the Alaska-Aleutian
3 Subduction Zone.

4 (iii) A covered event in the Kuril-
5 Kamchatka Subduction Zone.

6 (B) REQUIREMENTS.—The report under
7 this paragraph shall, with respect to each type
8 of covered event described in subparagraph (A)
9 include each of the following:

10 (i) A description of a command struc-
11 ture plan, including the roles of Federal
12 agencies, State and local governments, In-
13 dian Tribes, Tribal organizations, and Na-
14 tive Hawaiian organizations for during and
15 following the covered event.

16 (ii) A description of how Federal
17 agencies can improve coordination to en-
18 hance the ability to prepare and plan for,
19 mitigate against, provide warning of, re-
20 spond to, and recover from the covered
21 event.

22 (iii) A strategy to ensure collaboration
23 between relevant Federal agencies for pur-
24 poses of—

- 1 (I) completing a risk assessment
2 of Federal facilities to identify such
3 facilities that may need improvements
4 to withstand the covered event; and
- 5 (II) developing a strategic plan
6 to—
- 7 (aa) support mitigation ef-
8 forts for and retrofitting of Fed-
9 eral, State, local, and Tribal crit-
10 ical infrastructure; and
- 11 (bb) help save lives during
12 and immediately after the cov-
13 ered event.
- 14 (iv) A strategy to improve Federal
15 guidance and assistance to State and local
16 governments, Indian Tribes, Tribal organi-
17 zations, and Native Hawaiian organiza-
18 tions in developing and implementing com-
19 prehensive plans to develop the ability to
20 prepare and plan for, mitigate against,
21 provide warning of, respond to, and recover
22 from the covered event.
- 23 (v) In the case the covered event is
24 large scale, an interagency search and res-

1 cue strategy for such covered event, which
2 strategy shall include—

3 (I) a command structure plan,
4 including the roles of Federal agen-
5 cies, State and local governments, In-
6 dian Tribes, Tribal organizations, and
7 Native Hawaiian organizations if such
8 command structure would differ from
9 the structure under clause (i);

10 (II) the sources of personnel and
11 assets that can be utilized to support
12 search and rescue efforts;

13 (III) an estimation of the re-
14 quired personnel and assets and an
15 identification of any gaps in personnel
16 and assets; and

17 (IV) an identification of and a
18 strategy to address the vulnerabilities
19 of existing infrastructure that will be
20 necessary for search and rescue ef-
21 forts.

22 (vi) A strategy for addressing the im-
23 pacts of the covered event to critical infra-
24 structure, including the responsibilities of
25 Federal agencies, State and local govern-

1 ments, Indian Tribes, Tribal organizations,
2 Native Hawaiian organizations, and pri-
3 vate entities.

4 (vii) Recommendations on how Fed-
5 eral agencies can develop a mitigation
6 strategy, including providing financial as-
7 sistance to State, local, and Tribal opera-
8 tors, for any infrastructure that provides
9 information to support or issue warnings
10 for the covered event.

11 (viii) Recommendations on adminis-
12 trative or legislative changes required to
13 implement the report for the covered event.

14 (C) PUBLIC AVAILABILITY.—Not later
15 than 1 month after completing the report under
16 this paragraph, the Comptroller General shall
17 make such report available to the public.

18 (3) ENTITIES DESCRIBED.—The entities de-
19 scribed in this paragraph are—

20 (A) the Administration, the Federal Emer-
21 gency Management Agency, the United States
22 Geological Survey, the National Guard Bureau,
23 the Coast Guard, the United States Transpor-
24 tation Command, the Department of Transpor-

1 tation, and other Federal agencies as deter-
2 mined appropriate by the Comptroller General;

3 (B) the States of Alaska, California, Ha-
4 waii, Oregon, and Washington;

5 (C) the territories of American Samoa,
6 Guam, and the Commonwealth of the Northern
7 Mariana Islands;

8 (D) Indian Tribes, Tribal organizations,
9 and Native Hawaiian organizations;

10 (E) local governments;

11 (F) institutions of higher education and
12 other research institutions with relevant exper-
13 tise; and

14 (G) private sector representatives that may
15 be impacted by the applicable type of covered
16 event described in paragraph (2)(A).

17 (4) STRATEGY.—Not later than 1 year after the
18 completion of the report required under paragraph
19 (2), the Administration and the Federal Emergency
20 Management Agency shall, in consultation with the
21 National Guard Bureau, the Coast Guard, the
22 United States Transportation Command, the United
23 States Geological Survey, the Department of Trans-
24 portation, and other Federal agencies as determined
25 appropriate, provide the Committee on Commerce,

1 Science, and Transportation of the Senate and the
2 Committee on Science, Space, and Technology of the
3 House of Representatives a written strategy and
4 briefing on how the relevant Federal agencies will
5 implement such report within their respective statu-
6 tory authorities for each type of covered event de-
7 scribed in paragraph (2)(A).

8 (n) DEFINITIONS.—In this section, the terms “Ad-
9 ministration”, “Administrator”, “Indian Tribe”, “Native
10 Hawaiian organization”, “Tribal organization”, and “tsu-
11 nami” have the meanings given such terms in section 802
12 of the Tsunami Warning and Education Act (33 U.S.C.
13 3201).