AMENDMENT NO.	Calendar No.

Purpose: In the nature of a substitute.

## IN THE SENATE OF THE UNITED STATES-117th Cong., 2d Sess.

## **S.3531**

To require the Federal Government to produce a national climate adaptation and resilience strategy, and for other purposes.

Referred to the Committee on \_\_\_\_\_\_ and ordered to be printed

Ordered to lie on the table and to be printed

AMENDMENT IN THE NATURE OF A SUBSTITUTE intended to be proposed by Mr. PETERS

Viz:

1 Strike all after the enacting clause and insert the fol-

2 lowing:

## **3** SECTION 1. SHORT TITLE.

4 This Act may be cited as the "National Climate Ad-

5 aptation and Resilience Strategy Act of 2022".

6 SEC. 2. NATIONAL CLIMATE ADAPTATION AND RESILIENCE

- 7 STRATEGY.
- 8 (a) DEFINITIONS.—In this section:
- 9 (1) ADAPTATION.—The term "adaptation"
  10 means an adjustment in a natural or human system
  11 in response to a new or changing environmental con-

1	dition, including such an adjustment associated with
2	climate change, that exploits beneficial opportunities
3	or moderates negative effects.
4	(2) ADAPTIVE CAPACITY.—The term "adaptive
5	capacity" means the ability of a system—
6	(A) to adjust to climate vulnerabilities to
7	moderate potential damage or harm;
8	(B) to take advantage of new, and poten-
9	tially beneficial, opportunities; or
10	(C) to cope with change.
11	(3) Cascading climate hazards.—The term
12	"cascading climate hazards" means a series of suc-
13	cessive environmental hazards triggered by an initial
14	hazard that is driven or exacerbated by climate
15	change, such that the impacts to vulnerable systems
16	are amplified.
17	(4) CHIEF RESILIENCE OFFICER.—The term
18	"Chief Resilience Officer" means the Chief Resil-
19	ience Officer of the United States appointed by the
20	President under subsection (b)(1)(A).
21	(5) CLIMATE CHANGE.—The term "climate
22	change" means changes in average atmospheric and
23	oceanic conditions that persist over multiple decades
24	or longer and are natural or anthropogenic in origin,
25	including-

1	(A) both increases and decreases in tem-
2	perature;
3	(B) shifts in precipitation;
4	(C) shifts in ecoregion or biome geography
5	and phenology, as applicable;
6	(D) changing risk from certain types of
7	rapid-onset climate hazards and slow-onset cli-
8	mate hazards; and
9	(E) changes to other features of the cli-
10	mate system.
11	(6) CLIMATE INFORMATION.—The term "cli-
12	mate information" means information, data, or
13	products that enhance knowledge and understanding
14	of climate science, risk, conditions, vulnerability, or
15	impact, including—
16	(A) climate data products;
17	(B) historic or future climate projections
18	or scenarios;
19	(C) climate risk or vulnerability informa-
20	tion;
21	(D) data or information related to climate
22	adaptation and mitigation; and
23	(E) other best available climate science.
24	(7) Compound climate hazards.—The term
25	"compound climate hazards" means 2 or more envi-

1 ronmental hazards driven or exacerbated by climate 2 change that occur simultaneously or successively, 3 such that the impacts to vulnerable systems are amplified. 4 (8) COUNCIL.—The term "Council" means the 5 6 Partners Council on Climate Adaptation and Resil-7 ience established by subsection (c)(1). 8 (9) FEDERAL AGENCY.—The term "Federal 9 agency" has the meaning given the term "Executive 10 agency" in section 105 of title 5, United States 11 Code. 12 (10) FREELY ASSOCIATED STATE.—The term "Freely Associated State" means-13 14 (A) the Federated States of Micronesia; 15 (B) the Republic of the Marshall Islands; 16 and 17 (C) the Republic of Palau. 18 (11)FRONTLINE COMMUNITIES.—The term 19 "frontline communities" means human communities 20 that-21 (A) are highly vulnerable to climate change 22 or exposed to climate risk; 23 (B) experience the earliest, most adverse 24 impacts of climate change; and

1	(C) may have a reduced ability to adapt to
2	climate change due to a lack of resources, polit-
3	ical power, or adaptive capacity.
4	(12) IMPLEMENTATION PLAN.—The term "Im-
5	plementation Plan" means the Implementation Plan
6	jointly developed by the Chief Resilience Officer and
7	the Working Groups under subsection $(e)(2)$ .
8	(13) INDIAN TRIBE.—The term "Indian Tribe"
9	has the meaning given the term in section 4 of the
10	Indian Self-Determination and Education Assistance
11	Act (25 U.S.C. 5304).
12	(14) NATIONAL CLIMATE ASSESSMENT.—The
13	term "National Climate Assessment" means the as-
14	sessment delivered to Congress and the President
15	pursuant to section 106 of the Global Change Re-
16	search Act of 1990 (15 U.S.C. 2936).
17	(15) NATURAL INFRASTRUCTURE.—The term
18	"natural infrastructure" means infrastructure
19	that—
20	(A) uses, restores, or emulates natural eco-
21	logical, geological, or physical processes; and
22	(B)(i) is created through the action of nat-
23	ural physical, geological, biological, and chem-
24	ical processes over time;

(ii) is created by human design, engineer ing, and construction to emulate or act in con cert with natural processes; or

4 (iii) involves the use of plants, soils, and 5 other natural features, including through the 6 creation, restoration, or preservation of natural 7 areas using materials appropriate to the region 8 to manage stormwater and runoff, to attenuate 9 flooding and storm surges, to manage erosion 10 and saltwater intrusion, and for other related 11 purposes.

12 PARTNER.—The (16)Non-federal term "non-Federal partner" means a member of a unit of 13 14 State, local, or territorial government, the govern-15 ment of an Indian Tribe, the government of a Freely 16 Associated State, a private sector entity, or another 17 individual or organization not affiliated with the 18 Federal Government.

19 (17) OPERATIONS REPORT.—The term "Oper20 ations Report" means the National Climate Adapta21 tion and Resilience Operations Report jointly devel22 oped by the Chief Resilience Officer and the Work23 ing Groups under subsection (d).

24 (18) RAPID-ONSET CLIMATE HAZARD.—The
25 term "rapid-onset climate hazard" means an abrupt

environmental hazard driven or exacerbated by cli mate change that occurs quickly or unexpectedly and
 triggers impacts that materialize rapidly and inter act with conditions of exposure and vulnerability to
 result in a disaster.

6 (19) REPRESENTED AGENCY.—The term "rep7 resented agency" means each Federal agency from
8 which the Chief Resilience Officer appoints a mem9 ber to a Working Group under subsection
10 (b)(2)(D)(ii)(II).

11 (20)**RESILIENCE.**—The term "resilience" 12 means the capacity of a social, physical, economic, or 13 environmental system to cope with an environmental 14 hazard event, trend, or disturbance that is driven or 15 exacerbated by climate change by responding or re-16 organizing in ways that maintain, to the greatest ex-17 tent practicable, the essential function, identity, and 18 structure of the system and ensure that, in the event 19 of a rapid-onset climate hazard or a slow-onset cli-20 mate hazard, basic human needs are met, while also 21 maintaining the capacity for adaptation and trans-22 formation.

23 (21) RISK.—

1	(A) IN GENERAL.—The term "risk" means
2	the potential for consequences in a situation in
3	which—
4	(i) something of value is at stake; and
5	(ii) the outcome is uncertain.
6	(B) Inclusion.—The term "risk" includes
7	the potential for consequences described in sub-
8	paragraph (A) that is evaluated as the product
9	obtained by multiplying—
10	(i) the probability of a hazard occur-
11	ring; by
12	(ii) the consequence that would result
13	if the hazard occurred.
14	(22) Slow-onset climate hazard.—
15	(A) IN GENERAL.—The term "slow-onset
16	climate hazard" means an environmental haz-
17	ard driven or exacerbated by climate change
18	that evolves gradually through time due to in-
19	cremental change or because of an increasing
20	frequency or intensity of recurring climate im-
21	pacts.
22	(B) INCLUSIONS.—The term "slow-onset
23	climate hazard" includes hazards such as—
24	(i) sea level rise;
25	(ii) desertification;

	-
1	(iii) biodiversity loss or the alteration
2	of or shift in habitat range of individual
3	species or entire biomes;
4	(iv) increasing temperatures;
5	(v) ocean acidification;
6	(vi) saltwater intrusion;
7	(vii) soil salinization;
8	(viii) drought and water scarcity;
9	(ix) reduced snow pack;
10	(x) sea ice retreat;
11	(xi) glacial ice retreat;
12	(xii) permafrost thaw; and
13	(xiii) coastal and river bank erosion.
14	(23) STRATEGY.—The term "Strategy" means
15	the National Climate Adaptation and Resilience
16	Strategy required to be developed jointly by the
17	Chief Resilience Officer and the Working Groups
18	under subsection $(e)(1)$ .
19	(24) TERRITORIAL GOVERNMENT.—The term
20	"territorial government" means the government of a
21	territory (as defined in section 602(g) of the Social
22	Security Act (42 U.S.C. 802(g))).
23	(25) VULNERABILITY.—The term "vulner-
24	ability" means the propensity or predisposition of a
25	human individual or community or physical, biologi-

1	cal, or socioeconomic system to be susceptible to and
2	adversely affected by the impacts of climate change.
3	(26) Working group.—The term "Working
4	Group" means a National Climate Adaptation and
5	Resilience Working Group established by the Chief
6	Resilience Officer under subsection $(b)(2)$ .
7	(b) CHIEF RESILIENCE OFFICER AND NATIONAL
8	CLIMATE ADAPTATION AND RESILIENCE WORKING
9	GROUPS.—
10	(1) CHIEF RESILIENCE OFFICER.—
11	(A) IN GENERAL.—Not later than 120
12	days after the date of enactment of this Act,
13	the President shall identify or appoint a Chief
14	Resilience Officer of the United States to serve
15	in the Executive Office of the President.
16	(B) DUTIES.—The Chief Resilience Officer
17	shall—
18	(i) serve the President by directing a
19	whole-of-government effort to build resil-
20	ience to climate change vulnerabilities in
21	the United States (as described in the Na-
22	tional Climate Assessment or other rel-
23	evant analyses identified by the Chief Re-
24	silience Officer) in collaboration with exist-

1	ing Federal initiatives and interagency ad-
2	aptation efforts;
3	(ii) establish Working Groups in ac-
4	cordance with paragraph $(2)$ to facilitate
5	interagency coordination with respect to
6	climate resilience and adaptation; and
7	(iii) at the end of a presidential ad-
8	ministration, delegate the duties of the
9	Chief Resilience Officer to the Executive
10	Secretary of the Working Groups des-
11	ignated under paragraph $(2)(F)(i)(I)$ until
12	a new Chief Resilience Officer is ap-
13	pointed.
14	(C) COMPENSATION.—The Chief Resilience
15	Officer shall be compensated by the Federal
16	Government at level III of the Executive Sched-
17	ule in subchapter II of chapter 53 of title 5,
18	United States Code.
19	(2) Working groups.—
20	(A) ESTABLISHMENT.—
21	(i) IN GENERAL.—Subject to clause
22	(ii), the Chief Resilience Officer shall es-
23	tablish the minimum number of National
24	Climate Adaptation and Resilience Work-
25	ing Groups that is necessary to carry out

1	the duties and purposes described in sub-
2	paragraph (C).
3	(ii) LIMITATION.—The Chief Resil-
4	ience Officer shall not establish more than
5	5 Working Groups.
6	(B) FOCUS.—Each Working Group shall
7	focus on a topic or series of related topics with
8	respect to climate adaptation and resilience, as
9	determined by the Chief Resilience Officer.
10	(C) DUTIES AND PURPOSE.—Each Work-
11	ing Group shall, under the leadership of the
12	Chief Resilience Officer, with respect to the
13	focus of the Working Group—
14	(i) coordinate a whole-of-government
15	plan to build resilience to the applicable
16	climate change vulnerabilities described in
17	the National Climate Assessment or other
18	relevant analyses identified by the Chief
19	Resilience Officer;
20	(ii) assist in the development of the
21	applicable portions of—
22	(I) the Operations Report;
23	(II) the Strategy; and
24	(III) the Implementation Plan;
25	and

1	(iii) assist in the standardization
2	across represented agencies of, with re-
3	spect to climate change, the term "resil-
4	ience" to promote greater consistency in
5	Federal resilience leadership.
6	(D) STRUCTURE.—
7	(i) CHAIRPERSON.—
8	(I) IN GENERAL.—Subject to a
9	designation under subclause (III), the
10	Chief Resilience Officer shall serve as
11	chairperson of each Working Group.
12	(II) TEMPORARY CHAIR-
13	PERSON.—The President or the Chief
14	Resilience Officer may designate an-
15	other staff member or member of a
16	Working Group to act temporarily as
17	the chairperson of that Working
18	Group in the absence of the Chief Re-
19	silience Officer.
20	(III) DESIGNATED AGENCY
21	CHAIRPERSON.—The Chief Resilience
22	Officer may designate as chairperson
23	of a Working Group the head of a
24	represented agency that serves on that
25	Working Group.

1	(ii) Membership.—In establishing a
2	Working Group, the Chief Resilience Offi-
3	cer shall—
4	(I) identify each Federal agency
5	with operations or organizational
6	units that are relevant to the focus of
7	the Working Group; and
8	(II) appoint 1 member of each
9	Federal agency identified under sub-
10	clause (I) to represent that Federal
11	agency on the Working Group.
12	(iii) REQUIREMENT.—In appointing a
13	member of a Working Group under clause
14	(ii)(II), the Chief Resilience Officer shall,
15	to the maximum extent practicable, ap-
16	point the head of the portion of the rep-
17	resented agency that is most relevant to
18	the focus of the Working Group.
19	(iv) DUTIES OF MEMBERS.—Each
20	member of a Working Group—
21	(I) shall attend meetings of the
22	Working Group; and
23	(II) work to support the duties of
24	the Working Group.
25	(E) MEETINGS.—

1	(i) IN GENERAL.—Each Working
2	Group shall meet not less frequently than
3	once every 180 days.
4	(ii) QUORUM.— <sup>3</sup> / <sub>4</sub> of the members of
5	a Working Group shall constitute a
6	quorum of the Working Group.
7	(iii) REMOTE PARTICIPATION.—A
8	member of a Working Group may partici-
9	pate in a meeting of that Working Group
10	through teleconference or similar means.
11	(F) Support personnel.—
12	(i) EXECUTIVE SECRETARY.—
13	(I) IN GENERAL.—The Chief Re-
14	silience Officer shall designate a per-
15	manent employee of a represented
16	agency to serve as Executive Sec-
17	retary of the Working Groups.
18	(II) Employment.—The em-
19	ployee designated as Executive Sec-
20	retary under subclause (I) shall re-
21	main an employee of the agency, de-
22	partment, or program from which the
23	employee was appointed.
24	(ii) NECESSARY ASSISTANCE.—To
25	carry out the purposes of each Working

1	Group, as described in subparagraph (C),
2	each represented agency with a member on
3	the Working Group shall furnish necessary
4	assistance to that Working Group, such
5	as—
6	(I) a detail of employees to the
7	Working Group to perform such func-
8	tions, consistent with the purposes of
9	the Working Group described in sub-
10	paragraph (C), as the Chief Resilience
11	Officer may assign, including support
12	staff for the Executive Secretary ap-
13	pointed under clause (i)(I); and
14	(II) on request of the Chief Resil-
15	ience Officer, undertaking special
16	studies for the Working Group as may
17	be appropriate to carry out the func-
18	tions of the Working Group.
19	(c) Partners Council on Climate Adaptation
20	AND RESILIENCE.—
21	(1) ESTABLISHMENT.—There is established a
22	council, to be known as the "Partners Council on
23	Climate Adaptation and Resilience".
24	(2) MISSION AND FUNCTION.—The Council
25	shall work to improve the climate adaptation and re-

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1	silience operations of the Federal Government by
2	providing recommendations through the Chief Resil-
3	ience Officer, including those recommendations con-
4	tained in the report required under paragraph (3),
5	that identify how the Federal Government can better
6	support non-Federal partners with equitable re-
7	sources, technical assistance, improved policies, and
8	other assistance to help frontline communities build
9	resilience to climate change.
10	(3) Report.—Not later than 16 months after
11	the date of enactment of this Act, and every 3 years
12	thereafter, the Council, acting through the Chief Re-
13	silience Officer, shall submit to the President and
14	the Working Groups a report that includes—
15	(A) an analysis of the deficiencies or gaps
16	in the climate resilience operations of the Fed-
17	eral Government that reduce or fail to increase
18	the capacity of non-Federal partners to adapt
19	to climate change;
20	(B) an identification of the resources, in-
21	cluding Federal funding, necessary for non-Fed-
22	eral partners to adequately adapt to climate
23	change; and
24	(C) recommendations with respect to how
25	the Federal Government could better support

1	efforts by non-Federal partners to expeditiously
2	address vulnerabilities associated with climate
3	change and build climate resilience.
4	(4) CHAIR AND VICE-CHAIR.—The Chief Resil-
5	ience Officer shall serve as chairperson of the Coun-
6	cil and shall appoint a vice-chairperson from among
7	the members of the Council appointed pursuant to
8	paragraph (5).
9	(5) Membership.—
10	(A) IN GENERAL.—In addition to the Chief
11	Resilience Officer, the Council shall consist of
12	not more than 23 members appointed by the
13	Chief Resilience Officer.
14	(B) Appointment.—
15	(i) IN GENERAL.—The Chief Resil-
16	ience Officer shall appoint members of the
17	Council who can support the Working
18	Groups by articulating how the Federal
19	Government can better support State gov-
20	ernments, local governments, territorial
21	governments, the governments of Indian
22	Tribes, the governments of Freely Associ-
23	ated States, nonprofit organizations, or
24	private sector entities to build resilience to
25	climate change.

1	(ii) Non-federal partner mem-
2	BERS.—The Chief Resilience Officer shall
3	appoint 20 non-Federal partner members
4	of the Council as follows:
5	(I) 12 members who are employ-
6	ees of State governments, local gov-
7	ernments, territorial governments, the
8	governments of Indian Tribes, or the
9	governments of Freely Associated
10	States, of which—
11	(aa) not fewer than 2 shall
12	be employees of a State govern-
13	ment;
14	(bb) not fewer than 2 shall
15	be employees of a unit of local
16	government;
17	(cc) not fewer than 2 shall
18	be employees of the government
19	of an Indian Tribe; and
20	(dd) not fewer than 2 shall
21	be employees of a territorial gov-
22	ernment or the government of a
23	Freely Associated State; and

	20
1	(II) 8 members who represent
2	nongovernmental organizations and
3	the private sector, of which—
4	(aa) 3 shall represent non-
5	governmental organizations;
6	(bb) 3 shall represent the
7	private sector; and
8	(cc) 2 shall represent aca-
9	demic institutions.
10	(iii) Represented agency mem-
11	BERS.—The Chief Resilience Officer may,
12	with the consent of those representatives,
13	appoint not more than 3 representatives of
14	represented agencies to the Council that
15	the Chief Resilience Officer determines
16	would promote dialogue useful for imple-
17	mentation of the duties of the Council
18	while keeping the size of the Council man-
19	ageable.
20	(iv) Selection.—To the maximum
21	extent practicable, the Chief Resilience Of-
22	ficer shall seek to select members of the
23	Council who—
24	(I) possess first-hand, lived expe-
25	rience of climate vulnerability in the

1	United States, including direct experi-
2	ence working with, or as members of,
3	frontline communities; and
4	(II) represent a diversity of—
5	(aa) perspectives;
6	(bb) demographics;
7	(cc) geographies;
8	(dd) political affiliations;
9	and
10	(ee) institution sizes, includ-
11	ing representatives of both small
12	and large units of government
13	and businesses.
14	(v) TERM.—Members appointed to the
15	Council shall serve a single term of not
16	more than 3 years, except that—
17	(I) of the initial members ap-
18	pointed to the Council, the Chief Re-
19	silience Officer shall appoint—
20	(aa) $\frac{1}{2}$ of the members to
21	serve for a term of 18 months;
22	and
23	(bb) $\frac{1}{2}$ of the members to
24	serve a term of 3 years; and

1	(II) the Chief Resilience Officer
2	may extend the term of any member
3	of the Council by a period of not more
4	than 1 year on a one-time basis, if the
5	Chief Resilience Officer determines it
6	necessary to support the work of the
7	Council.
8	(vi) VACANCIES.—
9	(I) IN GENERAL.—A vacancy in
10	the Council shall be filled in the same
11	manner in which the original selection
12	was made.
13	(II) Appointment of New Mem-
14	BERS.—After the expiration of the
15	term for which a member of the
16	Council is appointed, the member may
17	continue to serve until a successor is
18	appointed.
19	(6) MEETINGS.—
20	(A) IN GENERAL.—The Council shall meet
21	not less frequently than once every 180 days.
22	(B) QUORUM.— <sup>3</sup> / <sub>4</sub> of the members of the
23	Council shall constitute a quorum of the Coun-
24	cil.

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1 (C) REMOTE PARTICIPATION.—A member 2 of the Council may participate in a meeting of 3 the Council through teleconference or similar 4 means. 5 (7) Applicability of faca.—Section 14 of 6 the Federal Advisory Committee Act (5 U.S.C. 7 App.) shall not apply to the Council. 8 (d) NATIONAL CLIMATE ADAPTATION AND RESIL-

9 IENCE OPERATIONS REPORT.—Not later than 16 months
10 after the date of enactment of this Act, and every 3 years
11 thereafter, the Chief Resilience Officer and the Working
12 Groups shall jointly and simultaneously submit to the
13 President and Congress a National Climate Adaptation
14 and Resilience Operations Report that includes—

(1) a summary of the existing climate resilience
operations of each represented agency that includes—

(A) the roles and responsibilities of each
represented agency in building national resilience to the climate vulnerabilities described in
the National Climate Assessment or other analyses relevant to each represented agency;

23 (B) the major findings and conclusions24 from climate adaptation plans or risk or vulner-

1	ability assessments prepared by each rep-
2	resented agency;
3	(C) the mechanisms by which each rep-
4	resented agency supports the resilience efforts
5	of non-Federal partners, such as by providing
6	funding, resources, and technical assistance;
7	and
8	(D) an assessment of how each represented
9	agency is working to ensure equitable adapta-
10	tion outcomes; and
11	(2) a cross-agency analysis of the resilience op-
12	erations identified under paragraph (1) that—
13	(A) identifies—
14	(i) the challenges, barriers, or dis-
15	incentives for the Federal Government to
16	build resilience to climate change in the
17	United States;
18	(ii) the inconsistencies in goals, prior-
19	ities, or strategies underlying climate resil-
20	ience operations and policy across rep-
21	resented agencies that may inhibit effective
22	interagency coordination to support na-
23	tional climate resilience, including—

1	(I) the areas of necessary dif-
2	ferences in those goals, priorities, or
3	strategies; and
4	(II) the justifications for those
5	inconsistencies;
6	(iii) areas of overlap or redundant use
7	of resources between or among represented
8	agencies, including recommendations to
9	eliminate any unnecessary or unintentional
10	redundancy;
11	(iv) gaps or deficiencies in resilience
12	operations and policy that need to be ad-
13	dressed in the context of the Strategy;
14	(v) opportunities for greater collabora-
15	tion between or among represented agen-
16	cies to improve Federal Government resil-
17	ience operations and policy; and
18	(vi) opportunities for greater collabo-
19	ration between the Federal Government
20	and non-Federal partners to build local-
21	level adaptive capacity and resilience; and
22	(B) includes a review and summary of all
23	available Federal funding from represented
24	agencies that is specifically allocated for climate

1	adaptation activities to be undertaken by non-
2	Federal partners, including—
3	(i) a summary of Federal funding
4	available in appropriations accounts and
5	subaccounts;
6	(ii) disparities between the supply and
7	demand for adaptation funding available to
8	non-Federal partners; and
9	(iii) existing mechanisms to ensure
10	Federal funding allocations are being di-
11	rected to frontline communities with the
12	greatest level of vulnerability.
13	(e) NATIONAL CLIMATE ADAPTATION AND RESIL-
14	IENCE STRATEGY.—
15	(1) Strategy.—
16	(A) IN GENERAL.—Not later than 2 years
17	after the date of enactment of this Act, the
18	Chief Resilience Officer and the Working
19	Groups shall jointly submit and simultaneously
20	
	to the President and Congress a National Cli-
21	
21 22	to the President and Congress a National Cli-
	to the President and Congress a National Cli- mate Adaptation and Resilience Strategy.
22	to the President and Congress a National Cli- mate Adaptation and Resilience Strategy. (B) UPDATES.—Not later than the date

Strategy to the President and Congress under
subparagraph (A), and every 3 years thereafter,
the Chief Resilience Officer and the Working
Groups shall jointly submit an updated version
of the Strategy to the President and Congress
to account for—
(i) new science related to climate
change, resilience, and adaptation;
(ii) relevant changes in Federal Gov-
ernment structure, congressional authori-
ties, or appropriations; and
(iii) any other necessary improve-
ments or changes identified by the Chief
Resilience Officer.
(C) PURPOSE AND SCOPE.—The Strategy
shall describe strategies for the Federal Govern-
ment, in partnership with non-Federal partners,
to address the vulnerabilities of the United
States to climate change described in the Na-
tional Climate Assessment or other relevant
analyses identified by the Chief Resilience Offi-
cer to ensure that—
(i) the United States has an over-
arching strategic vision to respond to cli-
mate change that—

	20
1	(I) identifies national climate re-
2	silience goals and guides national cli-
3	mate adaptation efforts;
4	(II) facilitates the incorporation
5	of the climate resilience goals identi-
6	fied under subclause (I) into relevant
7	national programs, operations, and
8	strategies;
9	(III) develops proactive, long-
10	term, scenario-based strategies to plan
11	for and respond to current and future
12	climate impacts to human commu-
13	nities, natural resources and public
14	land, and infrastructure and other
15	physical assets;
16	(IV) emphasizes forward-thinking
17	adaptation strategies, including
18	predisaster mitigation, that seek to
19	overcome repeated climate impacts to
20	vulnerable systems and communities;
21	(V) prioritizes climate resilience
22	efforts to support the most vulnerable
23	human communities and the most ur-
24	gent national resilience challenges, as
25	determined by the Chief Resilience Of-

1	ficer in consultation with the Working
2	Groups;
3	(VI) avoids unnecessary
4	redundancies and inefficiencies in the
5	national planning for and response to
6	climate change; and
7	(VII) recognizes the vulnerability
8	of natural systems to climate change
9	and underscores the importance of
10	promoting ecosystem resilience to pre-
11	serve the intrinsic value of nature and
12	support ecosystem services relied on
13	by human beings;
14	(ii) Federal investments in Federal
15	and non-Federal infrastructure and assets
16	promote climate resilience to the maximum
17	extent practicable; and
18	(iii) the adaptive capacity and resil-
19	ience of State governments, local govern-
20	ments, territorial governments, the govern-
21	ments of Indian Tribes, and governments
22	of Freely Associated States are maximized
23	to the maximum extent practicable.
24	(D) COUNCIL RECOMMENDATIONS.—In de-
25	veloping the Strategy, the Chief Resilience Offi-

1	cer and Working Groups shall consider the rec-
2	ommendations of the Council.
3	(E) INCLUSIONS.—In addition to the over-
4	arching strategies developed in accordance with
5	subparagraph (C), the Strategy shall include in-
6	formation with respect to the following:
7	(i) DIRECT FEDERAL GOVERNMENT
8	RESPONSE TO CLIMATE CHANGE.—
9	(I) Addressing the limitations,
10	redundancies, and opportunities for
11	improved resilience operations of the
12	Federal Government that are identi-
13	fied in the Operations Report.
14	(II) Better preparing the United
15	States for the adverse impacts experi-
16	enced or anticipated to be experienced
17	as a result of—
18	(aa) rapid-onset climate haz-
19	ards;
20	(bb) slow-onset climate haz-
21	ards;
22	(cc) compound climate haz-
23	ards; and
24	(dd) cascading climate haz-
25	ards.

1	(III) Educating, engaging, or de-
2	veloping the skills of the workforce of
3	the represented agencies with respect
4	to topics related to climate change
5	vulnerability and resilience to promote
6	effective Federal resilience operations.
7	(IV) An identification of opportu-
8	nities and appropriate circumstances
9	for represented agencies to better uti-
10	lize natural infrastructure as an adap-
11	tation strategy.
12	(ii) Support of non-federal part-
13	NERS' RESPONSE TO CLIMATE CHANGE
14	(I) Methods for represented
15	agencies to better collaborate and
16	work directly with non-Federal part-
17	ners to increase the resilience and
18	adaptive capacity of State govern-
19	ments, local governments, territorial
20	governments, the governments of In-
21	dian Tribes, the governments of Free-
22	ly Associated States, and other non-
23	Federal partners.
24	(II) Educating non-Federal part-
25	ners about the availability of Federal

1	funding opportunities identified in the
2	Operations Report under subsection
3	(d)(2)(B), including the development
4	of a centralized, cross-agency portal
5	that allows non-Federal partners to
6	easily identify and apply for appro-
7	priate Federal funding opportunities
8	for the specific resilience needs of
9	those non-Federal partners.
10	(III) Clarifying, simplifying, and
11	harmonizing the planning require-
12	ments and application processes for
13	State governments, local governments,
14	territorial governments, the govern-
15	ments of Indian Tribes, and the gov-
16	ernments of Freely Associated States
17	to access Federal funds for climate
18	adaptation and resilience efforts
19	across represented agencies.
20	(IV) Identifying under-resourced
21	communities and communities with
22	low adaptive capacity and resilience
23	and to directly support those commu-

24 nities in applying for Federal funds

1	for climate adaptation and resilience
2	efforts.
3	(V) Supporting the retreat or re-
4	location of human communities in
5	areas that are at increasing risk from
6	climate change, in particular from
7	slow-onset climate hazards, including
8	strategies to better manage equitable
9	property buyouts, managed retreat, or
10	relocation options for communities in
11	those areas.
12	(iii) Climate information.—
13	(I) Increasing the accessibility
14	and utility of climate information that
15	is produced, published, or hosted by
16	the Federal Government, including
17	strategies to better collaborate across
18	the represented agencies and work
19	with non-Federal partners—
20	(aa) to provide the high-
21	quality, locally relevant climate
22	information and, where prac-
23	ticable and useful, transparent
24	and replicable downscaled climate
25	projections that are necessary to

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1	support local-level adaptation ef-
2	forts;
3	(bb) to establish improved
4	methods of communicating cli-
5	mate risk and other relevant cli-
6	mate information;
7	(cc) to better educate non-
8	Federal partners about the avail-
9	able resources for climate infor-
10	mation; and
11	(dd) to assist non-Federal
12	partners in selecting and using
13	appropriate climate information
14	or related tools.
15	(II) Standardized procedures to
16	synthesize, align, and update climate
17	information produced, published, or
18	hosted by the Federal Government to
19	create arrays of standardized national,
20	regional, and, where applicable, local
21	climate information for adaptation
22	planning.
23	(III) An assessment of the neces-
24	sity and utility of developing or im-
25	proving a centralized clearinghouse

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1	and dedicated Federal program for
2	climate information to better provide
3	climate information to end users.
4	(IV) Developing the centralized
5	clearinghouse or dedicated Federal
6	program described in subclause (III),
7	if such an effort is determined to be
8	necessary by the Chief Resilience Offi-
9	cer.
10	(iv) RESILIENCE METRICS AND INDI-
11	CATORS.—At the discretion of the Chief
12	Resilience Officer, developing or improving
13	resilience metrics and indicators to assist
14	the Federal Government and non-Federal
15	partners—
16	(I) to the maximum extent prac-
17	ticable, to consistently measure the re-
18	silience of human communities, nat-
19	ural systems, and physical assets to
20	climate change;
21	(II) to set baselines and targets
22	to measurably increase climate resil-
23	ience over time; and
24	(III) to better monitor and assess
25	the effectiveness of various resilience-

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1	building activities after implementa-
2	tion.
3	(v) FUNDING CLIMATE ADAPTA-
4	TION.—
5	(I) Helping to prioritize Federal
6	funding expenditures for adaptation
7	and resilience in consideration of the
8	greatest vulnerabilities.
9	(II) Creating financial incentives
10	for adaptation and resilience efforts.
11	(III) A review of the cost-benefit
12	analysis methodologies and discount
13	rates used by represented agencies for
14	all Federal investments, including a
15	review of the implications of those
16	methodologies and discount rates for
17	climate adaptation and resilience.
18	(IV) Recommendations to im-
19	prove the methodologies described in
20	subclause (III) to reflect—
21	(aa) the added value of resil-
22	ience planning and construction
23	methodologies over the lifetime of
24	a project or unit of infrastruc-
25	ture;

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1	(bb) the benefits of natural
2	infrastructure investments;
3	(cc) the potential value of
4	retreat and relocation as adapta-
5	tion solutions; and
6	(dd) to what extent existing
7	cost-benefit analysis methodolo-
8	gies lead to inequitable outcomes
9	or outcomes that increase climate
10	vulnerability.
11	(vi) Social equity.—
12	(I) Ensuring that the costs, bene-
13	fits, and risks resulting from climate
14	resilience efforts, including funding al-
15	locations, the methodologies for deter-
16	mining funding allocations, and exist-
17	ing and future policies, are equitably
18	distributed among sectors of society,
19	types of communities, and geog-
20	raphies.
21	(II) Ensuring that federally sup-
22	ported climate resilience efforts are—
23	(aa) designed in consultation
24	with the communities that will be
25	affected by those efforts; and

1	(bb) centered on the needs
2	of those communities.
3	(III) To the greatest extent prac-
4	ticable, integrating social equity con-
5	siderations across all aspects of the
6	Strategy.
7	(2) Implementation plan.—Concurrently
8	with the Strategy and each update of the Strategy,
9	the Chief Resilience Officer and the Working Groups
10	shall jointly and simultaneously submit to the Presi-
11	dent and Congress an Implementation Plan that de-
12	scribes how represented agencies intend to carry out
13	the Strategy, which shall include—
14	(A) a description of the roles and respon-
15	sibilities of each represented agency in carrying
16	out each element of the Strategy described in
17	paragraph (1);
18	(B) a plan to enter into such interagency
19	agreements between and among represented
20	agencies, partnerships with non-Federal enti-
21	ties, and other agreements for coordination be-
22	tween and among the Federal Government and
23	non-Federal partners as may be necessary to
24	facilitate a unified national plan to build resil-
25	ience to climate change; and

1	(C) the use of any relevant metrics and in-
2	dicators described in paragraph $(1)(E)(iv)$ .
3	(3) Assessment.—Not later than 2 years fol-
4	lowing the completion of each Strategy under para-
5	graph (1)(A) and each Implementation Plan, the
6	Comptroller General of the United States shall si-
7	multaneously submit to the President and Congress
8	a report that assesses—
9	(A) the extent to which the Strategy and
10	Implementation Plan have been carried out by
11	the Federal Government, which shall be judged,
12	as appropriate, based on any metrics and indi-
13	cators developed to track progress in increasing
14	resilience under paragraph (1)(E)(iv);
15	(B) the effectiveness of the actions taken
16	under the Strategy and Implementation Plan
17	and the resulting outcomes of those actions in
18	building national resilience to climate change;
19	and
20	(C) the progress made towards the devel-
21	opment of an effective whole-of-government ef-
22	fort to build resilience to the climate
23	vulnerabilities described in the National Climate
24	Assessment or other relevant analyses identified
25	by the Chief Resilience Officer, including rec-

1	ommendations for additional steps necessary to
2	reach this goal.
3	(4) PUBLIC COMMENT.—The Chief Resilience
4	Officer shall—
5	(A) publish draft and final versions of the
6	Strategy and Implementation Plan, and each
7	update to the Strategy and Implementation
8	Plan; and
9	(B) through publication in the Federal
10	Register, solicit comments from the public on
11	the draft versions of the documents published
12	under subparagraph (A) for a period of 60
13	days, which the Chief Resilience Officer and the
14	Working Groups shall consider before submit-
15	ting final versions of the Strategy and Imple-
16	mentation Plan, and updates to the Strategy
17	and Implementation Plan, to the President and
18	Congress.
19	(f) SUNSET.—This section ceases to be effective on
20	the date that is the earlier of—
21	(1) the date on which the Comptroller General
22	of the United States submits to the President and
23	Congress the third assessment report under sub-
24	section $(e)(3)$ ; and

(2) the date that is the last day of fiscal year
 2033.