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# S. 3531

[Report No. 117-237]

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

#### IN THE SENATE OF THE UNITED STATES

January 20, 2022

Mr. Coons (for himself, Ms. Murkowski, Ms. Collins, Ms. Rosen, Mr. Cassidy, Mr. Graham, Mr. Bennet, Mrs. Shaheen, Mr. Kaine, and Mr. Padilla) introduced the following bill; which was read twice and referred to the Committee on Homeland Security and Governmental Affairs

DECEMBER 12, 2022

Reported by Mr. Peters, with an amendment

[Strike out all after the enacting clause and insert the part printed in italic]

## A BILL

To require the Federal Government to produce a national climate adaptation and resilience strategy, 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,

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

2	This Act may be cited as the "National Climate Ad-
3	aptation and Resilience Strategy Act".
4	SEC. 2. DEFINITIONS.
5	In this Act:
6	(1) ADAPTATION.—The term "adaptation"
7	means an adjustment in a natural or human system
8	in response to a new or changing environmental con-
9	dition, including such an adjustment associated with
10	elimate change, that exploits beneficial opportunities
11	or moderates negative effects.
12	(2) ADAPTIVE CAPACITY.—The term "adaptive
13	capacity" means the ability of a system—
14	(A) to adjust to elimate vulnerabilities to
15	moderate potential damage or harm;
16	(B) to take advantage of new, and poten-
17	tially beneficial, opportunities; or
18	(C) to cope with change.
19	(3) CASCADING CLIMATE HAZARDS.—The term
20	"cascading climate hazards" means a series of suc-
21	cessive environmental hazards triggered by an initial
22	hazard that is driven or exacerbated by elimate
23	change, such that the impacts to vulnerable systems
24	are amplified.
25	(4) CHIEF RESILIENCE OFFICER.—The term
26	"Chief Resilience Officer" means the Chief Resil-

1	ience Officer of the United States appointed by the
2	President under section $3(a)(1)$ .
3	(5) CLIMATE CHANGE.—The term "climate
4	change" means changes in average atmospheric and
5	oceanic conditions that persist over multiple decades
6	or longer and are natural or anthropogenic in origin,
7	including—
8	(A) both increases and decreases in tem-
9	<del>perature;</del>
10	(B) shifts in precipitation;
11	(C) shifts in ecoregion or biome geography
12	and phenology, as applicable;
13	(D) changing risk from certain types of
14	rapid-onset elimate hazards and slow-onset eli-
15	mate hazards; and
16	(E) changes to other features of the cli-
17	mate system.
18	(6) CLIMATE INFORMATION.—The term "cli-
19	mate information" means information, data, or
20	products that enhance knowledge and understanding
21	of elimate science, risk, conditions, vulnerability, or
22	impact, including—
23	(A) elimate data products;
24	(B) historie or future elimate projections
25	or scenarios:

1	(C) climate risk or vulnerability informa-
2	tion;
3	(D) data or information related to elimate
4	adaptation and mitigation; and
5	(E) other best available climate science.
6	(7) COMPOUND CLIMATE HAZARDS.—The term
7	"compound climate hazards" means 2 or more envi-
8	ronmental hazards driven or exacerbated by climate
9	change that occur simultaneously or successively,
10	such that the impacts to vulnerable systems are am-
11	<del>plified.</del>
12	(8) Council.—The term "Council" means the
13	Partners Council on Climate Adaptation and Resil-
14	ience established by section 4(a).
15	(9) Freely associated state.—The term
16	"Freely Associated State" means—
17	(A) the Commonwealth of the Northern
18	Mariana Islands;
19	(B) the Federated States of Micronesia;
20	(C) the Republic of the Marshall Islands;
21	(D) the Republic of Palau; and
22	(E) the United States Virgin Islands.
23	(10) Frontline communities.—The term
24	"frontline communities" means human communities
25	that—

1	(A) are highly vulnerable to climate change
2	or exposed to elimate risk;
3	(B) experience the earliest, most adverse
4	impacts of climate change; and
5	(C) may have a reduced ability to adapt to
6	elimate change due to a lack of resources, polit-
7	ical power, or adaptive capacity.
8	(11) Implementation plan.—The term "Im-
9	plementation Plan" means the Implementation Plan
10	jointly developed by the Chief Resilience Officer and
11	the Working Groups under section 6(b).
12	(12) Indian Tribe.—The term "Indian Tribe"
13	has the meaning given the term in section 4 of the
14	Indian Self-Determination and Education Assistance
15	Act (25 U.S.C. 5304).
16	(13) NATIONAL CLIMATE ASSESSMENT.—The
17	term "National Climate Assessment" means the as-
18	sessment delivered to Congress and the President
19	pursuant to section 106 of the Global Change Re-
20	search Act of 1990 (15 U.S.C. 2936).
21	(14) NATURAL INFRASTRUCTURE.—The term
22	"natural infrastructure" means infrastructure
23	<del>that—</del>
24	(A) uses, restores, or emulates natural eco-
25	logical, geological, or physical processes; and

1	(B)(i) is created through the action of nat-
2	ural physical, geological, biological, and chem-
3	ical processes over time;
4	(ii) is created by human design, engineer-
5	ing, and construction to emulate or act in con-
6	eert with natural processes; or
7	(iii) involves the use of plants, soils, and
8	other natural features, including through the
9	ereation, restoration, or preservation of natural
10	areas using materials appropriate to the region
11	to manage stormwater and runoff, to attenuate
12	flooding and storm surges, to manage erosion
13	and saltwater intrusion, and for other related
14	<del>purposes.</del>
15	(15) Non-federal partner.—The term
16	"non-Federal partner" means a member of a unit of
17	State, local, or territorial government, the govern-
18	ment of an Indian Tribe, the government of a Freely
19	Associated State, a private sector entity, or another
20	individual or organization not affiliated with the
21	Federal Government.
22	(16) OPERATIONS REPORT.—The term "Oper-
23	ations Report" means the National Climate Adapta-

tion and Resilience Operations Report jointly devel-

- oped by the Chief Resilience Officer and the Working Groups under section 5.
- 17) RAPID-ONSET CLIMATE HAZARD.—The
  term "rapid-onset climate hazard" means an abrupt
  environmental hazard driven or exacerbated by climate change that occurs quickly or unexpectedly and
  triggers impacts that materialize rapidly and interact with conditions of exposure and vulnerability to
  result in a disaster.
  - (18) REPRESENTED AGENCY.—The term "represented agency" means each Federal agency from which the Chief Resilience Officer appoints a member to a Working Group under section 3(b)(4)(B)(ii).
  - means the capacity of a social, physical, economic, or environmental system to cope with an environmental hazard event, trend, or disturbance that is driven or exacerbated by climate change by responding or reorganizing in ways that maintain, to the greatest extent practicable, the essential function, identity, and structure of the system and ensure that, in the event of a rapid-onset climate hazard or a slow-onset climate hazard, basic human needs are met, while also

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

1	(B) INCLUSIONS.—The term "slow-onset
2	elimate hazard" includes hazards such as—
3	(i) sea level rise;
4	(ii) desertification;
5	(iii) biodiversity loss or the alteration
6	of or shift in habitat range of individual
7	species or entire biomes;
8	(iv) increasing temperatures;
9	(v) ocean acidification;
10	(vi) saltwater intrusion;
11	(vii) soil salinization;
12	(viii) drought and water searcity;
13	(ix) reduced snow pack;
14	(x) sea ice retreat;
15	(xi) glacial ice treat;
16	(xii) permafrost thaw; and
17	(xiii) coastal and river bank erosion.
18	(22) STRATEGY.—The term "Strategy" means
19	the National Climate Adaptation and Resilience
20	Strategy required to be developed jointly by the
21	Chief Resilience Officer and the Working Groups
22	under section 6(a).
23	(23) Vulnerability.—The term "vulner-
24	ability" means the propensity or predisposition of a
25	human individual or community or physical, biologi-

1	eal, or socioeconomic system to be susceptible to and
2	adversely affected by the impacts of climate change.
3	(24) 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 section 3(b).
7	SEC. 3. CHIEF RESILIENCE OFFICER AND NATIONAL CLI-
8	MATE ADAPTATION AND RESILIENCE WORK-
9	ING GROUPS.
10	(a) Chief Resilience Officer.—
11	(1) In General.—Not later than 120 days
12	after the date of enactment of this Act, the Presi-
13	dent shall identify or appoint a Chief Resilience Offi-
14	cer of the United States to serve in the Executive
15	Office of the President.
16	(2) Duties.—The Chief Resilience Officer
17	<del>shall—</del>
18	(A) serve the President by directing a
19	whole-of-government effort to build resilience to
20	climate change vulnerabilities in the United
21	States (as described in the National Climate
22	Assessment or other relevant analyses identified
23	by the Chief Resilience Officer) in collaboration
24	with existing Federal initiatives and interagency
25	adaptation efforts; and

1	(B) establish Working Groups in accord-
2	ance with subsection (b) to facilitate inter-
3	agency coordination with respect to climate re-
4	silience and adaptation.
5	(b) Working Groups.—
6	(1) Establishment.—
7	(A) In General.—Subject to subpara-
8	graph (B), the Chief Resilience Officer shall es-
9	tablish the minimum number of National Cli-
10	mate Adaptation and Resilience Working
11	Groups that is necessary to carry out the duties
12	and purposes described in paragraph (3).
13	(B) Limitation.—The Chief Resilience
14	Officer shall not establish more than 5 Working
15	Groups.
16	(2) Focus.—Each Working Group shall focus
17	on a topic or series of related topics with respect to
18	elimate adaptation and resilience, as determined by
19	the Chief Resilience Officer.
20	(3) Duties and purpose. Each Working
21	Group shall, under the leadership of the Chief Resil-
22	ience Officer, with respect to the focus of the Work-
23	ing Group—
24	(A) coordinate a whole-of-government plan
25	to build resilience to the applicable climate

1	change vulnerabilities described in the National
2	Climate Assessment or other relevant analyses
3	identified by the Chief Resilience Officer; and
4	(B) assist in the development of the appli-
5	cable portions of—
6	(i) the Operations Report;
7	(ii) the Strategy; and
8	(iii) the Implementation Plan.
9	(4) Structure.—
10	(A) Chairperson.—
11	(i) In General.—The Chief Resil-
12	ience Officer shall serve as chairperson of
13	each Working Group.
14	(ii) Temporary Chairperson.—The
15	President or the Chief Resilience Officer
16	may designate another staff member or
17	member of a Working Group to act tempo-
18	rarily as the chairperson of that Working
19	Group in the absence of the Chief Resil-
20	ience Officer.
21	(B) Membership.—In establishing a
22	Working Group, the Chief Resilience Officer
23	<del>shall—</del>
24	(i) identify each Federal agency with
25	operations or organizational units that are

1	relevant to the focus of the Working
2	Group; and
3	(ii) appoint 1 member of each Federal
4	agency identified under clause (i) to rep-
5	resent that Federal agency on the Working
6	Group.
7	(C) REQUIREMENT.—In appointing a
8	member of a Working Group under subpara-
9	graph (B)(ii), the Chief Resilience Officer shall,
10	to the maximum extent practicable, appoint the
11	head of the portion of the represented agency
12	that is most relevant to the focus of the Work-
13	ing Group.
14	(D) DUTIES OF MEMBERS.—Each member
15	of a Working Group—
16	(i) shall attend meetings of the Work-
17	ing Group; and
18	(ii) work to support the duties of the
19	Working Group.
20	(5) MEETINGS.—
21	(A) In General.—Each Working Group
22	shall meet not less frequently than once every
23	180 days.

1	(B) Quorum.—3/4 of the members of a
2	Working Group shall constitute a quorum of
3	the Working Group.
4	(C) REMOTE PARTICIPATION.—A member
5	of a Working Group may participate in a meet-
6	ing of that Working Group through teleconfer-
7	ence or similar means.
8	(6) Support Personnel.—
9	(A) EXECUTIVE SECRETARY.—
10	(i) In General.—The Chief Resil-
11	ience Officer shall appoint a permanent
12	employee of a represented agency to serve
13	as Executive Secretary of the Working
14	Groups.
15	(ii) Employment.—The employee ap-
16	pointed as Executive Secretary under
17	elause (i) shall remain an employee of the
18	agency, department, or program from
19	which the employee was appointed.
20	(B) Necessary assistance.—To carry
21	out the purposes of each Working Group, as de-
22	scribed in paragraph (3), each represented
23	agency with a member on the Working Group
24	shall furnish necessary assistance to that Work-
25	ing Group, such as—

1	(i) the detail of employees to the
2	Working Group to perform such functions,
3	consistent with the purposes of the Work-
4	ing Group described in paragraph (3), as
5	the Chief Resilience Officer may assign, in-
6	eluding support staff for the Executive
7	Secretary appointed under subparagraph
8	(A)(i); and
9	(ii) on request of the Chief Resilience
10	Officer, undertaking special studies for the
11	Working Group as may be appropriate to
12	earry out the functions of the Working
13	Group.
14	SEC. 4. PARTNERS COUNCIL ON CLIMATE ADAPTATION
15	AND RESILIENCE.
16	(a) Establishment.—There is established a coun-
17	eil, to be known as the "Partners Council on Climate Ad-
18	aptation and Resilience".
19	(b) MISSION AND FUNCTION.—The Council shall
20	work to improve the climate adaptation and resilience op-
21	erations of the Federal Government by providing rec-
22	ommendations through the Chief Resilience Officer, in-
23	eluding those recommendations contained in the report re-
24	quired under subsection (e), that identify how the Federal
25	Government can better support non-Federal partners with

- 1 equitable resources, technical assistance, improved poli-
- 2 cies, and other assistance to help frontline communities
- 3 build resilience to climate change.
- 4 (e) REPORT.—Not later than 16 months after the
- 5 date of enactment of this Act, and every 3 years there-
- 6 after, the Council, acting through the Chief Resilience Of-
- 7 ficer, shall submit to the President and the Working
- 8 Groups a report that includes—
- 9 (1) an analysis of the deficiencies or gaps in the
- 10 climate resilience operations of the Federal Govern-
- 11 ment that reduce or fail to increase the capacity of
- 12 non-Federal partners to adapt to climate change;
- 13 (2) an identification of the resources, including
- 14 Federal funding, necessary for non-Federal partners
- to adequately adapt to climate change; and
- 16 (3) recommendations with respect to how the
- 17 Federal Government could better support efforts by
- 18 non-Federal partners to expeditiously address
- 19 vulnerabilities associated with elimate change and
- 20 build climate resilience.
- 21 (d) CHAIR AND VICE-CHAIR.—The Chief Resilience
- 22 Officer shall serve as chairperson of the Council and shall
- 23 appoint a vice-chairperson from among the members of
- 24 the Council appointed pursuant to subsection (e).
- 25 (e) Membership.—

1	(1) In General.—In addition to the Chief Re-
2	silience Officer, the Council shall consist of 20 non-
3	Federal partner members appointed by the Chief Re-
4	silience Officer.
5	(2) Appointment.—
6	(A) In General.—The Chief Resilience
7	Officer shall appoint members of the Council
8	who can support the Working Groups by articu-
9	lating how the Federal Government can better
10	support State, local, and territorial govern-
11	ments, the governments of Indian Tribes, the
12	governments of Freely Associated States, non-
13	profit organizations, or private sector entities to
14	build resilience to climate change.
15	(B) REQUIREMENTS.—In appointing mem-
16	bers of the Council, the Chief Resilience Officer
17	shall appoint—
18	(i) 12 members who are employees of
19	State, local, or territorial governments, the
20	governments of Indian Tribes, or the gov-
21	ernments of Freely Associated States, of
22	which—
23	(I) not fewer than 2 shall be em-
24	plovees of a State government;

1	(II) not fewer than 2 shall be
2	employees of a unit of local govern-
3	ment;
4	(III) not fewer than 2 shall be
5	employees of the government of an In-
6	dian Tribe; and
7	(IV) not fewer than 2 shall be
8	employees of a territorial government
9	or the government of a Freely Associ-
10	ated State; and
11	(ii) 8 members who represent non-
12	governmental organizations and the private
13	sector, of which—
14	(I) 3 shall represent nongovern-
15	mental organizations;
16	(H) 3 shall represent the private
17	sector; and
18	(III) 2 shall represent academic
19	institutions.
20	(C) Selection.—To the maximum extent
21	practicable, the Chief Resilience Officer shall
22	seek to select members of the Council who—
23	(i) possess firsthand, lived experience
24	of climate vulnerability in the United
25	States, including direct experience working

1	with, or as members of, frontline commu-
2	nities; and
3	(ii) represent a diversity of—
4	(I) perspectives;
5	(II) demographics;
6	(III) geographies;
7	(IV) political affiliations; and
8	(V) institution sizes, including
9	representatives of both small and
10	large units of government and busi-
11	nesses.
12	(D) Term.—Members appointed to the
13	Council shall serve a single term of not more
14	than 3 years, except that—
15	(i) of the initial members appointed to
16	the Council, the Chief Resilience Officer
17	shall appoint—
18	$(I)$ $\frac{1}{2}$ of the members to serve
19	for a term of 18 months; and
20	$(H)$ $\frac{1}{2}$ of the members to serve
21	a term of 3 years; and
22	(ii) the Chief Resilience Officer may
23	extend the term of any member of the
24	Council by a period of not more than 1
25	year on a one-time basis, if the Chief Re-

1	silience Officer determines it necessary to
2	support the work of the Council.
3	(E) VACANCIES.—
4	(i) In General.—A vacancy in the
5	Council shall be filled in the same manner
6	in which the original selection was made.
7	(ii) Appointment of New Mem-
8	BERS.—After the expiration of the term
9	for which a member of the Council is ap-
10	pointed, the member may continue to serve
11	until a successor is appointed.
12	(f) MEETINGS.—
13	(1) In General.—The Council shall meet not
14	less frequently than once every 180 days.
15	(2) QUORUM.—3/4 of the members of the Coun-
16	cil shall constitute a quorum of the Council.
17	(3) REMOTE PARTICIPATION.—A member of the
18	Council may participate in a meeting of the Council
19	through teleconference or similar means.
20	(g) Applicability of FACA.—Section 14 of the
21	Federal Advisory Committee Act (5 U.S.C. App.) shall not
22	apply to the Council.

SEC. 5. NATIONAL CLIMATE ADAPTATION AND RESILIENCE

#### 2 OPERATIONS REPORT. 3 Not later than 16 months after the date of enactment of this Act, and every 3 years thereafter, the Chief Resil-5 ience Officer and the Working Groups shall jointly submit to the President and Congress a National Climate Adapta-6 7 tion and Resilience Operations Report that includes— 8 (1) a summary of the existing climate resilience 9 operations of each represented agency that in-10 <del>cludes—</del> 11 (A) the roles and responsibilities of each 12 represented agency in building national resil-13 ience to the climate vulnerabilities described in 14 the National Climate Assessment or other anal-15 yses relevant to each represented agency; 16 (B) the major findings and conclusions 17 from climate adaptation plans or risk or vulner-18 ability assessments prepared by each rep-19 resented agency; 20 (C) the mechanisms by which each rep-21 resented agency supports the resilience efforts 22 of non-Federal partners, such as by providing 23 funding, resources, and technical assistance; 24 and

1	(D) an assessment of how each represented
2	agency is working to ensure equitable adapta-
3	tion outcomes; and
4	(2) a cross-agency analysis of the resilience op-
5	erations identified under paragraph (1) that—
6	(A) identifies—
7	(i) the challenges, barriers, or dis-
8	incentives for the Federal Government to
9	build resilience to elimate change in the
10	United States;
11	(ii) the inconsistencies in goals, prior-
12	ities, or strategies underlying climate resil-
13	ience operations and policy across rep-
14	resented agencies that may inhibit effective
15	interagency coordination to support na
16	tional climate resilience, including—
17	(I) the areas of necessary dif-
18	ferences in those goals, priorities, or
19	strategies; and
20	(II) the justifications for those
21	inconsistencies;
22	(iii) areas of overlap or redundant use
23	of resources between or among represented
24	agencies, including recommendations to

1	eliminate any unnecessary or unintentional
2	redundancy;
3	(iv) gaps or deficiencies in resilience
4	operations and policy that need to be ad-
5	dressed in the context of the Strategy;
6	(v) opportunities for greater collabora-
7	tion between or among represented agen-
8	eies to improve Federal Government resil-
9	ience operations and policy; and
10	(vi) opportunities for greater collabo-
11	ration between the Federal Government
12	and non-Federal partners to build local-
13	level adaptive capacity and resilience; and
14	(B) includes a review and summary of all
15	available Federal funding from represented
16	agencies that is specifically allocated for climate
17	adaptation activities to be undertaken by non-
18	Federal partners, including—
19	(i) a summary of Federal funding
20	available in appropriations accounts and
21	subaccounts;
22	(ii) disparities between the supply and
23	demand for adaptation funding available to
24	non-Federal partners; and

1	(iii) existing mechanisms to ensure
2	Federal funding allocations are being di-
3	rected to frontline communities with the
4	greatest level of vulnerability.
5	SEC. 6. NATIONAL CLIMATE ADAPTATION AND RESILIENCE
6	STRATEGY.
7	(a) Strategy.—
8	(1) In General.—Not later than 2 years after
9	the date of enactment of this Act, the Chief Resil-
10	ience Officer and the Working Groups shall jointly
11	submit to the President and Congress a National
12	Climate Adaptation and Resilience Strategy.
13	(2) UPDATES.—Not later than the date that is
14	3 years after the date on which the Chief Resilience
15	Officer and the Working Groups jointly submit the
16	Strategy to the President and Congress under para-
17	graph (1), and every 3 years thereafter, the Chief
18	Resilience Officer and the Working Groups shall
19	jointly submit an updated version of the Strategy to
20	the President and Congress to account for—
21	(A) new science related to elimate change,
22	resilience, and adaptation;
23	(B) relevant changes in Federal Govern-
24	ment structure, congressional authorities, or ap-
25	propriations: and

1	(C) any other necessary improvements or
2	changes identified by the Chief Resilience Offi-
3	eer.
4	(3) PURPOSE AND SCOPE.—The Strategy shall
5	describe strategies for the Federal Government, in
6	partnership with non-Federal partners, to address
7	the vulnerabilities of the United States to climate
8	change described in the National Climate Assess-
9	ment or other relevant analyses identified by the
10	Chief Resilience Officer to ensure that—
11	(A) the United States has an overarching
12	strategie vision to respond to climate change
13	<del>that</del>
14	(i) identifies national climate resil-
15	ience goals and guides national climate ad-
16	aptation efforts;
17	(ii) facilitates the incorporation of the
18	elimate resilience goals identified under
19	clause (i) into relevant national programs,
20	operations, and strategies;
21	(iii) develops proactive, long-term, see-
22	nario-based strategies to plan for and re-
23	spond to current and future climate im-
24	pacts to human communities, natural re-

1	sources and public land, and infrastructure
2	and other physical assets;
3	(iv) emphasizes forward-thinking ad-
4	aptation strategies that seek to overcome
5	repeated climate impacts to vulnerable sys-
6	tems and communities;
7	(v) prioritizes elimate resilience efforts
8	to support the most vulnerable human
9	communities and the most urgent national
10	resilience challenges, as determined by the
11	Chief Resilience Officer in consultation
12	with the Working Groups;
13	(vi) avoids unnecessary redundancies
14	and inefficiencies in the national planning
15	for and response to climate change; and
16	(vii) recognizes the vulnerability of
17	natural systems to climate change and un-
18	derscores the importance of promoting eco-
19	system resilience to preserve the intrinsic
20	value of nature and support ecosystem
21	services relied on by human beings;
22	(B) Federal investments in Federal and
23	non-Federal infrastructure and assets promote
24	elimate resilience to the maximum extent prac-
25	ticable; and

1	(C) the adaptive capacity and resilience of
2	State, local, and territorial governments, gov-
3	ernments of Indian Tribes, and governments of
4	Freely Associated States are maximized to the
5	maximum extent practicable.
6	(4) Council recommendations.—In devel-
7	oping the Strategy, the Chief Resilience Officer and
8	Working Groups shall consider the recommendations
9	of the Council.
10	(5) Inclusions.—In addition to the over-
11	arching strategies developed in accordance with
12	paragraph (3), the Strategy shall include the fol-
13	<del>lowing:</del>
14	(A) DIRECT FEDERAL GOVERNMENT RE-
15	SPONSE TO CLIMATE CHANGE.
16	(i) Strategies to address the limita-
17	tions, redundancies, and opportunities for
18	improved resilience operations of the Fed-
19	eral Government that are identified in the
20	Operations Report.
21	(ii) Strategies to better prepare the
22	United States for the adverse impacts ex-
23	perienced or anticipated to be experienced
24	as a result of—
25	(1) rapid-onset climate hazards:

1	(II) slow-onset climate hazards;
2	(III) compound climate hazards:
3	<del>and</del>
4	(IV) cascading elimate hazards.
5	(iii) 1 or more strategies to educate,
6	engage, or develop the skills of the work-
7	force of the represented agencies with re-
8	spect to topics related to climate change
9	vulnerability and resilience to promote ef-
10	feetive Federal resilience operations.
11	(iv) An identification of opportunities
12	and appropriate circumstances for rep-
13	resented agencies to better utilize natural
14	infrastructure as an adaptation strategy.
15	(B) Support of non-federal part-
16	NERS' RESPONSE TO CLIMATE CHANGE.—
17	(i) 1 or more strategies for rep-
18	resented agencies to better collaborate and
19	work directly with non-Federal partners to
20	increase the resilience and adaptive capac-
21	ity of State, local, and territorial govern-
22	ments, the governments of Indian Tribes,
23	the governments of Freely Associated
24	States, and other non-Federal partners.

(ii) 1 or more strategies to educate non-Federal partners about the availability of Federal funding opportunities identified in the Operations Report under section 5(2)(B), including the development of a centralized, cross-agency portal that allows non-Federal partners to easily identify and apply for appropriate Federal funding op-portunities for the specific resilience needs of those non-Federal partners. (iii) 1 or more strategies to clarify, 

(iii) 1 or more strategies to clarify, simplify, and harmonize the planning requirements and application processes for State, local, and territorial governments, the governments of Indian Tribes, and the governments of Freely Associated States to access Federal funds for climate adaptation and resilience efforts across represented agencies.

(iv) 1 or more strategies to identify under-resourced communities and communities with low adaptive capacity and resilience and to directly support those communities in applying for Federal funds for elimate adaptation and resilience efforts.

1	(v) 1 or more strategies to suppor
2	the retreat or relocation of human commu-
3	nities in areas that are at increasing risk
4	from climate change, in particular from
5	slow-onset elimate hazards, including strat
6	egies to better manage equitable property
7	buyouts, managed retreat, or relocation op-
8	tions for communities in those areas.
9	(C) CLIMATE INFORMATION.—
10	(i) 1 or more strategies to increase
11	the accessibility and utility of climate in
12	formation that is produced, published, or
13	hosted by the Federal Government, includ-
14	ing strategies to better collaborate across
15	the represented agencies and work with
16	non-Federal partners—
17	(I) to provide the high-quality, lo
18	cally relevant elimate information and
19	where practicable and useful, trans
20	parent and replicable downscaled eli-
21	mate projections that are necessary to
22	support local-level adaptation efforts;
23	(II) to establish improved meth-
24	ods of communicating climate risk

1	and other relevant elimate informa-
2	tion;
3	(III) to better educate non-Fed-
4	eral partners about the available re-
5	sources for climate information; and
6	(IV) to assist non-Federal part-
7	ners in selecting and using appro-
8	priate elimate information or related
9	<del>tools.</del>
10	(ii) Standardized procedures to syn-
11	thesize, align, and update climate informa-
12	tion produced, published, or hosted by the
13	Federal Government to create arrays of
14	standardized national, regional, and, where
15	applicable, local climate information for
16	adaptation planning.
17	(iii) An assessment of the necessity
18	and utility of developing or improving a
19	centralized clearinghouse and dedicated
20	Federal program for climate information to
21	better provide elimate information to end
22	users.
23	(iv) 1 or more strategies to develop
24	the centralized clearinghouse or dedicated
25	Federal program described in clause (iii).

1	if such an effort is determined to be nec-
2	essary by the Chief Resilience Officer.
3	(D) RESILIENCE METRICS AND INDICA-
4	TORS.—At the discretion of the Chief Resilience
5	Officer, 1 or more strategies to develop or im-
6	prove resilience metrics and indicators to assist
7	the Federal Government and non-Federal part-
8	ners—
9	(i) to the maximum extent practicable,
10	to consistently measure the resilience of
11	human communities, natural systems, and
12	physical assets to climate change;
13	(ii) to set baselines and targets to
14	measurably increase climate resilience over
15	time; and
16	(iii) to better monitor and assess the
17	effectiveness of various resilience-building
18	activities after implementation.
19	(E) Funding climate adaptation.—
20	(i) 1 or more strategies to help
21	prioritize Federal funding expenditures for
22	adaptation and resilience in consideration
23	of the greatest vulnerabilities.

1	(ii) 1 or more strategies to create fi-
2	nancial incentives for adaptation and resil-
3	ience efforts.
4	(iii) A review of the cost-benefit anal-
5	ysis methodologies and discount rates used
6	by represented agencies for all Federal in-
7	vestments, including a review of the impli-
8	eations of those methodologies and dis-
9	count rates for climate adaptation and re-
10	silience.
11	(iv) Recommendations to improve the
12	methodologies described in clause (iii) to
13	<del>reflect—</del>
14	(I) the added value of resilience
15	planning and construction methodolo-
16	gies over the lifetime of a project or
17	unit of infrastructure;
18	(II) the benefits of natural infra-
19	structure investments;
20	(III) the potential value of re-
21	treat and relocation as adaptation so-
22	<del>lutions;</del> and
23	(IV) to what extent existing cost-
24	benefit analysis methodologies lead to

1	inequitable outcomes or outcomes that
2	increase climate vulnerability.
3	(F) Social Equity.—
4	(i) Strategies to ensure that the costs
5	benefits, and risks resulting from climate
6	resilience efforts, including funding alloca-
7	tions, the methodologies for determining
8	funding allocations, and existing and fu-
9	ture policies, are equitably distributed
10	among sectors of society, types of commu-
11	nities, and geographies.
12	(ii) Strategies to ensure that federally
13	supported elimate resilience efforts are—
14	(I) designed in consultation with
15	the communities that will be affected
16	by those efforts; and
17	(II) centered on the needs of
18	those communities.
19	(iii) To the greatest extent prac-
20	ticable, 1 or more strategies to integrate
21	social equity considerations across all as-
22	pects of the Strategy.
23	(b) IMPLEMENTATION PLAN.—Concurrently with the
24	Strategy and each update of the Strategy, the Chief Resil-
25	ience Officer and the Working Groups shall jointly submit

1	to the President and Congress an Implementation Plan
2	that describes how represented agencies intend to carry
3	out the Strategy, which shall include—
4	(1) a description of the roles and responsibil-
5	ities of each represented agency in carrying out each
6	element of the Strategy described in subsection (a);
7	(2) a plan to enter into such interagency agree-
8	ments between and among represented agencies,
9	partnerships with non-Federal entities, and other
10	agreements for coordination between and among the
11	Federal Government and non-Federal partners as
12	may be necessary to facilitate a unified national plan
13	to build resilience to climate change; and
14	(3) the use of any relevant metrics and indica-
15	tors described in subsection $(a)(5)(D)$ .
16	(e) Assessment.—Not later than 2 years following
17	the completion of each Strategy under subsection (a)(1)
18	and each Implementation Plan, the Comptroller General
19	of the United States shall submit to the President and
20	Congress a report that assesses—
21	(1) the extent to which the Strategy and Imple-
22	mentation Plan have been carried out by the Federal
23	Government, which shall be judged, as appropriate,
24	based on any metrics and indicators developed to

1	track progress in increasing resilience under sub-
2	section $(a)(5)(D)$ ;
3	(2) the effectiveness of the actions taken under
4	the Strategy and Implementation Plan and the re-
5	sulting outcomes of those actions in building na-
6	tional resilience to climate change; and
7	(3) the progress made towards the development
8	of an effective whole-of-government effort to build
9	resilience to the elimate vulnerabilities described in
10	the National Climate Assessment or other relevant
11	analyses identified by the Chief Resilience Officer,
12	including recommendations for additional steps nee-
13	essary to reach this goal.
14	(d) Public Comment.—The Chief Resilience Officer
15	<del>shall—</del>
16	(1) publish draft and final versions of the
17	Strategy and Implementation Plan, and each update
18	to the Strategy and Implementation Plan; and
19	(2) through publication in the Federal Register,
20	solicit comments from the public on the draft
21	versions of the documents published under para-
22	graph (1) for a period of 60 days, which the Chief
23	Resilience Officer and the Working Groups shall
24	consider before submitting final versions of the

Strategy and Implementation Plan, and updates to

1	the Strategy and Implementation Plan, to the Presi-
2	dent and Congress.
3	SEC. 7. GENERAL PROVISIONS.
4	(a) Sunset.—This Act ceases to be effective on the
5	date that is the earlier of—
6	(1) the date on which the Comptroller General
7	of the United States submits to the President and
8	Congress the third assessment report under section
9	6(e); and
10	(2) the date that is the last day of fiscal year
11	2032.
12	(b) Authorization of Appropriations.—There is
13	authorized to be appropriated to the Executive Office of
14	the President to earry out this Act \$2,000,000 for each
15	of fiscal years 2022 through the fiscal year in which this
16	Act ceases to be effective under subsection (a).
17	SECTION 1. SHORT TITLE.
18	This Act may be cited as the "National Climate Adap-
19	tation and Resilience Strategy Act of 2022".
20	SEC. 2. NATIONAL CLIMATE ADAPTATION AND RESILIENCE
21	STRATEGY.
22	(a) Definitions.—In this section:
23	(1) ADAPTATION.—The term "adaptation"
24	means an adjustment in a natural or human system
25	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 succes-
13	sive 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 Resilience
19	Officer of the United States appointed by the Presi-
20	$dent\ under\ subsection\ (b)(1)(A).$
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 climate
10	system.
11	(6) CLIMATE INFORMATION.—The term "climate
12	information" means information, data, or products
13	that enhance knowledge and understanding of climate
14	science, risk, conditions, vulnerability, or impact, in-
15	cluding—
16	(A) climate data products;
17	(B) historic or future climate projections or
18	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, such
3	that the impacts to vulnerable systems are amplified.
4	(8) Council.—The term "Council" means the
5	Partners Council on Climate Adaptation and Resil-
6	ience established by subsection $(c)(1)$ .
7	(9) Federal agency.—The term "Federal agen-
8	cy" has the meaning given the term "Executive agen-
9	cy" in section 105 of title 5, United States Code.
10	(10) Freely associated state.—The term
11	"Freely Associated State" means—
12	(A) the Federated States of Micronesia;
13	(B) the Republic of the Marshall Islands;
14	and
15	(C) the Republic of Palau.
16	(11) Frontline communities.—The term
17	"frontline communities" means human communities
18	that—
19	(A) are highly vulnerable to climate change
20	or exposed to climate risk;
21	(B) experience the earliest, most adverse im-
22	pacts of climate change; and
23	(C) may have a reduced ability to adapt to
24	climate change due to a lack of resources, polit-
25	ical power, or adaptive capacity.

1	(12) Implementation plan.—The term "Imple-
2	mentation Plan" means the Implementation Plan
3	jointly developed by the Chief Resilience Officer and
4	the Working Groups under subsection $(e)(2)$ .
5	(13) Indian Tribe.—The term "Indian Tribe"
6	has the meaning given the term in section 4 of the In-
7	dian Self-Determination and Education Assistance
8	Act (25 U.S.C. 5304).
9	(14) National climate assessment.—The
10	term "National Climate Assessment" means the as-
11	sessment delivered to Congress and the President pur-
12	suant to section 106 of the Global Change Research
13	Act of 1990 (15 U.S.C. 2936).
14	(15) Natural infrastructure.—The term
15	"natural infrastructure" means infrastructure that—
16	(A) uses, restores, or emulates natural eco-
17	logical, geological, or physical processes; and
18	(B)(i) is created through the action of nat-
19	ural physical, geological, biological, and chem-
20	ical processes over time;
21	(ii) is created by human design, engineer-
22	ing, and construction to emulate or act in con-
23	cert with natural processes; or
24	(iii) involves the use of plants, soils, and
25	other natural features, including through the cre-

- ation, restoration, or preservation of natural areas using materials appropriate to the region to manage stormwater and runoff, to attenuate flooding and storm surges, to manage erosion and saltwater intrusion, and for other related purposes.
  - (16) Non-federal partner. The term "non-federal partner" means a member of a unit of State, local, or territorial government, the government of an Indian Tribe, the government of a Freely Associated State, a private sector entity, or another individual or organization not affiliated with the Federal Government.
    - (17) OPERATIONS REPORT.—The term "Operations Report" means the National Climate Adaptation and Resilience Operations Report jointly developed by the Chief Resilience Officer and the Working Groups under subsection (d).
    - (18) Rapid-onset climate hazard" means an abrupt environmental hazard driven or exacerbated by climate change that occurs quickly or unexpectedly and triggers impacts that materialize rapidly and interact with conditions of exposure and vulnerability to result in a disaster.

1	(19) Represented agency.—The term "rep-
2	resented agency" means each Federal agency from
3	which the Chief Resilience Officer appoints a member
4	to a Working Group under subsection
5	(b)(2)(D)(ii)(II).
6	(20) Resilience.—The term "resilience" means
7	the capacity of a social, physical, economic, or envi-
8	ronmental system to cope with an environmental haz-
9	ard event, trend, or disturbance that is driven or ex-
10	acerbated by climate change by responding or reorga-
11	nizing in ways that maintain, to the greatest extent
12	practicable, the essential function, identity, and struc-
13	ture of the system and ensure that, in the event of a
14	rapid-onset climate hazard or a slow-onset climate
15	hazard, basic human needs are met, while also main-
16	taining the capacity for adaptation and trans-
17	formation.
18	(21) RISK.—
19	(A) In general.—The term "risk" means
20	the potential for consequences in a situation in
21	which—
22	(i) something of value is at stake; and
23	(ii) the outcome is uncertain.
24	(B) Inclusion.—The term "risk" includes
25	the potential for consequences described in sub-

1	paragraph (A) that is evaluated as the product
2	obtained by multiplying—
3	(i) the probability of a hazard occur-
4	ring; by
5	(ii) the consequence that would result
6	if the hazard occurred.
7	(22) Slow-onset climate hazard.—
8	(A) In general.—The term "slow-onset cli-
9	mate hazard" means an environmental hazard
10	driven or exacerbated by climate change that
11	evolves gradually through time due to incre-
12	mental change or because of an increasing fre-
13	quency or intensity of recurring climate impacts.
14	(B) Inclusions.—The term "slow-onset cli-
15	mate hazard' includes hazards such as—
16	(i) sea level rise;
17	(ii) desertification;
18	(iii) biodiversity loss or the alteration
19	of or shift in habitat range of individual
20	species or entire biomes;
21	(iv) increasing temperatures;
22	(v) ocean acidification;
23	$(vi)\ saltwater\ intrusion;$
24	(vii) soil salinization;
25	(viii) drought and water scarcity;

1	(ix) reduced snow pack;
2	(x) sea ice retreat;
3	(xi) glacial ice retreat;
4	(xii) permafrost thaw; and
5	(xiii) coastal and river bank erosion.
6	(23) Strategy.—The term "Strategy" means
7	the National Climate Adaptation and Resilience
8	Strategy required to be developed jointly by the Chief
9	Resilience Officer and the Working Groups under sub-
10	section (e)(1).
11	(24) Territorial Government.—The term
12	"territorial government" means the government of a
13	territory (as defined in section 602(g) of the Social
14	Security Act (42 U.S.C. $802(g)$ )).
15	(25) Vulnerability.—The term "vulnerability"
16	means the propensity or predisposition of a human
17	individual or community or physical, biological, or
18	socioeconomic system to be susceptible to and ad-
19	versely affected by the impacts of climate change.
20	(26) Working Group.—The term "Working
21	Group" means a National Climate Adaptation and
22	Resilience Working Group established by the Chief
23	Resilience Officer under subsection $(b)(2)$ .
24	(b) Chief Resilience Officer and National Cli-
25	MATE ADAPTATION AND RESILIENCE WORKING GROUPS.—

1	(1) Chief resilience officer.—
2	(A) In general.—Not later than 120 days
3	after the date of enactment of this Act, the Presi-
4	dent shall identify or appoint a Chief Resilience
5	Officer of the United States to serve in the Exec-
6	utive Office of the President.
7	(B) Duties.—The Chief Resilience Officer
8	shall—
9	(i) serve the President by directing a
10	whole-of-government effort to build resilience
11	to climate change vulnerabilities in the
12	United States (as described in the National
13	Climate Assessment or other relevant anal-
14	yses identified by the Chief Resilience Offi-
15	cer) in collaboration with existing Federal
16	initiatives and interagency adaptation ef-
17	forts;
18	(ii) establish Working Groups in ac-
19	cordance with paragraph (2) to facilitate
20	interagency coordination with respect to cli-
21	mate resilience and adaptation; and
22	(iii) at the end of a presidential ad-
23	ministration, delegate the duties of the Chief
24	Resilience Officer to the Executive Secretary
25	of the Working Groups designated under

1	paragraph (2)(F)(i)(I) until a new Chief
2	Resilience Officer is appointed.
3	(C) Compensation.—The Chief Resilience
4	Officer shall be compensated by the Federal Gov-
5	ernment at level III of the Executive Schedule in
6	subchapter II of chapter 53 of title 5, United
7	States Code.
8	(2) Working groups.—
9	(A) Establishment.—
10	(i) In general.—Subject to clause
11	(ii), the Chief Resilience Officer shall estab-
12	lish the minimum number of National Cli-
13	mate Adaptation and Resilience Working
14	Groups that is necessary to carry out the
15	duties and purposes described in subpara-
16	graph(C).
17	(ii) Limitation.—The Chief Resilience
18	Officer shall not establish more than 5
19	Working Groups.
20	(B) Focus.—Each Working Group shall
21	focus on a topic or series of related topics with
22	respect to climate adaptation and resilience, as
23	determined by the Chief Resilience Officer.
24	(C) Duties and purpose.—Each Working
25	Group shall, under the leadership of the Chief

1	Resilience Officer, with respect to the focus of the
2	Working Group—
3	(i) coordinate a whole-of-government
4	plan to build resilience to the applicable cli-
5	mate change vulnerabilities described in the
6	National Climate Assessment or other rel-
7	evant analyses identified by the Chief Resil-
8	ience Officer;
9	(ii) assist in the development of the ap-
10	plicable portions of—
11	(I) the Operations Report;
12	(II) the Strategy; and
13	(III) the Implementation Plan;
14	and
15	(iii) assist in the standardization
16	across represented agencies of, with respect
17	to climate change, the term "resilience" to
18	promote greater consistency in Federal re-
19	$silience\ leadership.$
20	(D) Structure.—
21	(i) Chairperson.—
22	(I) In general.—Subject to a
23	designation under subclause (III), the
24	Chief Resilience Officer shall serve as
25	chairperson of each Working Group.

1	(II) Temporary chairperson.—
2	The President or the Chief Resilience
3	Officer may designate another staff
4	member or member of a Working
5	Group to act temporarily as the chair-
6	person of that Working Group in the
7	absence of the Chief Resilience Officer.
8	(III) Designated agency chair-
9	PERSON.—The Chief Resilience Officer
10	may designate as chairperson of a
11	Working Group the head of a rep-
12	resented agency that serves on that
13	Working Group.
14	(ii) Membership.—In establishing a
15	Working Group, the Chief Resilience Officer
16	shall—
17	(I) identify each Federal agency
18	with operations or organizational
19	units that are relevant to the focus of
20	the Working Group; and
21	(II) appoint 1 member of each
22	Federal agency identified under sub-
23	clause (I) to represent that Federal
24	agency on the Working Group.

1	(iii) Requirement.—In appointing a
2	member of a Working Group under clause
3	(ii)(II), the Chief Resilience Officer shall, to
4	the maximum extent practicable, appoint
5	the head of the portion of the represented
6	agency that is most relevant to the focus of
7	the Working Group.
8	(iv) Duties of members.—Each
9	member of a Working Group—
10	(I) shall attend meetings of the
11	Working Group; and
12	(II) work to support the duties of
13	the Working Group.
14	(E) Meetings.—
15	(i) In General.—Each Working
16	Group shall meet not less frequently than
17	once every 180 days.
18	(ii) Quorum.— $^{3}/_{4}$ of the members of a
19	Working Group shall constitute a quorum of
20	the Working Group.
21	(iii) Remote participation.—A
22	member of a Working Group may partici-
23	pate in a meeting of that Working Group
24	through teleconference or similar means.
25	(F) Support Personnel.—

1	(i) Executive secretary.—
2	(I) In General.—The Chief Re-
3	silience Officer shall designate a per-
4	manent employee of a represented
5	agency to serve as Executive Secretary
6	of the Working Groups.
7	(II) Employment.—The employee
8	designated as Executive Secretary
9	under subclause (I) shall remain an
10	employee of the agency, department, or
11	program from which the employee was
12	appointed.
13	(ii) Necessary assistance.—To
14	carry out the purposes of each Working
15	Group, as described in subparagraph (C),
16	each represented agency with a member on
17	the Working Group shall furnish necessary
18	assistance to that Working Group, such
19	as—
20	(I) a detail of employees to the
21	Working Group to perform such func-
22	tions, consistent with the purposes of
23	the Working Group described in sub-
24	paragraph (C), as the Chief Resilience
25	Officer may assign, including support

1	staff for the Executive Secretary ap-
2	pointed under clause (i)(I); and
3	(II) on request of the Chief Resil-
4	ience Officer, undertaking special stud-
5	ies for the Working Group as may be
6	appropriate to carry out the functions
7	of the Working Group.
8	(c) Partners Council on Climate Adaptation and
9	Resilience.—
10	(1) Establishment.—There is established a
11	council, to be known as the "Partners Council on Cli-
12	mate Adaptation and Resilience".
13	(2) Mission and function.—The Council shall
14	work to improve the climate adaptation and resilience
15	operations of the Federal Government by providing
16	recommendations through the Chief Resilience Officer,
17	including those recommendations contained in the re-
18	port required under paragraph (3), that identify how
19	the Federal Government can better support non-Fed-
20	eral partners with equitable resources, technical as-
21	sistance, improved policies, and other assistance to
22	help frontline communities build resilience to climate
23	change.
24	(3) Report.—Not later than 16 months after the
25	date of enactment of this Act, and every 3 years there-

1	after, the Council, acting through the Chief Resilience
2	Officer, shall submit to the President and the Working
3	Groups a report that includes—
4	(A) an analysis of the deficiencies or gaps
5	in the climate resilience operations of the Federal
6	Government that reduce or fail to increase the
7	capacity of non-Federal partners to adapt to cli-
8	$mate\ change;$
9	(B) an identification of the resources, in-
10	cluding Federal funding, necessary for non-Fed-
11	eral partners to adequately adapt to climate
12	change; and
13	(C) recommendations with respect to how
14	the Federal Government could better support ef-
15	forts by non-Federal partners to expeditiously
16	address vulnerabilities associated with climate
17	change and build climate resilience.
18	(4) Chair and vice-chair.—The Chief Resil-
19	ience Officer shall serve as chairperson of the Council
20	and shall appoint a vice-chairperson from among the
21	members of the Council appointed pursuant to para-
22	graph (5).
23	(5) Membership.—
24	(A) In General.—In addition to the Chief
25	Resilience Officer, the Council shall consist of not

1	more than 23 members appointed by the Chief
2	Resilience Officer.
3	(B) Appointment.—
4	(i) In General.—The Chief Resilience
5	Officer shall appoint members of the Coun-
6	cil who can support the Working Groups by
7	articulating how the Federal Government
8	can better support State governments, local
9	governments, territorial governments, the
10	governments of Indian Tribes, the govern-
11	ments of Freely Associated States, nonprofit
12	organizations, or private sector entities to
13	build resilience to climate change.
14	(ii) Non-federal partner mem-
15	BERS.—The Chief Resilience Officer shall
16	appoint 20 non-Federal partner members of
17	the Council as follows:
18	(I) 12 members who are employees
19	of State governments, local govern-
20	ments, territorial governments, the gov-
21	ernments of Indian Tribes, or the gov-
22	ernments of Freely Associated States,
23	of which—

1	(aa) not fewer than 2 shall
2	be employees of a State govern-
3	ment;
4	(bb) not fewer than 2 shall be
5	employees of a unit of local gov-
6	ernment;
7	(cc) not fewer than 2 shall be
8	employees of the government of an
9	Indian Tribe; and
10	(dd) not fewer than 2 shall
11	be employees of a territorial gov-
12	ernment or the government of a
13	Freely Associated State; and
14	(II) 8 members who represent
15	nongovernmental organizations and the
16	private sector, of which—
17	(aa) 3 shall represent non-
18	$governmental\ organizations;$
19	(bb) 3 shall represent the pri-
20	vate sector; and
21	(cc) 2 shall represent aca-
22	$demic\ institutions.$
23	(iii) Represented agency mem-
24	BERS.—The Chief Resilience Officer may,
25	with the consent of those representatives, ap-

1	point not more than 3 representatives of
2	represented agencies to the Council that the
3	Chief Resilience Officer determines would
4	promote dialogue useful for implementation
5	of the duties of the Council while keeping
6	the size of the Council manageable.
7	(iv) Selection.—To the maximum
8	extent practicable, the Chief Resilience Offi-
9	cer shall seek to select members of the Coun-
10	cil who—
11	(I) possess first-hand, lived experi-
12	ence of climate vulnerability in the
13	United States, including direct experi-
14	ence working with, or as members of,
15	frontline communities; and
16	(II) represent a diversity of—
17	(aa) perspectives;
18	(bb) demographics;
19	$(cc)\ geographies;$
20	(dd) $political$ $affiliations;$
21	and
22	(ee) institution sizes, includ-
23	ing representatives of both small
24	and large units of government
25	and businesses.

1	(v) Term.—Members appointed to the
2	Council shall serve a single term of not
3	more than 3 years, except that—
4	(I) of the initial members ap-
5	pointed to the Council, the Chief Resil-
6	ience Officer shall appoint—
7	(aa) $^{1}/_{2}$ of the members to
8	serve for a term of 18 months; and
9	(bb) $^{1}/_{2}$ of the members to
10	serve a term of 3 years; and
11	(II) the Chief Resilience Officer
12	may extend the term of any member of
13	the Council by a period of not more
14	than 1 year on a one-time basis, if the
15	Chief Resilience Officer determines it
16	necessary to support the work of the
17	Council.
18	(vi) Vacancies.—
19	(I) In general.—A vacancy in
20	the Council shall be filled in the same
21	manner in which the original selection
22	was made.
23	(II) Appointment of New Mem-
24	BERS.—After the expiration of the
25	term for which a member of the Coun-

1	cil is appointed, the member may con-
2	tinue to serve until a successor is ap-
3	pointed.
4	(6) Meetings.—
5	(A) In General.—The Council shall meet
6	not less frequently than once every 180 days.
7	(B) Quorum.— $\frac{3}{4}$ of the members of the
8	Council shall constitute a quorum of the Council.
9	(C) Remote participation.—A member of
10	the Council may participate in a meeting of the
11	Council through teleconference or similar means.
12	(7) APPLICABILITY OF FACA.—Section 14 of the
13	Federal Advisory Committee Act (5 U.S.C. App.)
14	shall not apply to the Council.
15	(d) National Climate Adaptation and Resilience
16	Operations Report.—Not later than 16 months after the
17	date of enactment of this Act, and every 3 years thereafter,
18	the Chief Resilience Officer and the Working Groups shall
19	jointly and simultaneously submit to the President and
20	Congress a National Climate Adaptation and Resilience
21	Operations Report that includes—
22	(1) a summary of the existing climate resilience
23	operations of each represented agency that includes—
24	(A) the roles and responsibilities of each
25	represented agency in building national resil-

1	ience to the climate vulnerabilities described in
2	the National Climate Assessment or other anal-
3	yses relevant to each represented agency;
4	(B) the major findings and conclusions
5	from climate adaptation plans or risk or vulner-
6	ability assessments prepared by each represented
7	agency;
8	(C) the mechanisms by which each rep-
9	resented agency supports the resilience efforts of
10	non-Federal partners, such as by providing
11	funding, resources, and technical assistance; and
12	(D) an assessment of how each represented
13	agency is working to ensure equitable adaptation
14	outcomes; and
15	(2) a cross-agency analysis of the resilience oper-
16	ations identified under paragraph (1) that—
17	(A) identifies—
18	(i) the challenges, barriers, or disincen-
19	tives for the Federal Government to build
20	resilience to climate change in the United
21	States;
22	(ii) the inconsistencies in goals, prior-
23	ities, or strategies underlying climate resil-
24	ience operations and policy across rep-
25	resented agencies that may inhibit effective

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

1	cies that is specifically allocated for climate ad-
2	aptation activities to be undertaken by non-Fed-
3	eral partners, including—
4	(i) a summary of Federal funding
5	available in appropriations accounts and
6	subaccounts;
7	(ii) disparities between the supply and
8	demand for adaptation funding available to
9	non-Federal partners; and
10	(iii) existing mechanisms to ensure
11	Federal funding allocations are being di-
12	rected to frontline communities with the
13	greatest level of vulnerability.
14	(e) National Climate Adaptation and Resilience
15	Strategy.—
16	(1) Strategy.—
17	(A) In General.—Not later than 2 years
18	after the date of enactment of this Act, the Chief
19	Resilience Officer and the Working Groups shall
20	jointly submit and simultaneously to the Presi-
21	dent and Congress a National Climate Adapta-
22	tion and Resilience Strategy.
23	(B) UPDATES.—Not later than the date that
24	is 3 years after the date on which the Chief Re-
25	silience Officer and the Working Groups jointly

1	and simultaneously submit the Strategy to the
2	President and Congress under subparagraph (A),
3	and every 3 years thereafter, the Chief Resilience
4	Officer and the Working Groups shall jointly
5	submit an updated version of the Strategy to the
6	President and Congress to account for—
7	(i) new science related to climate
8	change, resilience, and adaptation;
9	(ii) relevant changes in Federal Gov-
10	ernment structure, congressional authorities,
11	or appropriations; and
12	(iii) any other necessary improvements
13	or changes identified by the Chief Resilience
14	Officer.
15	(C) Purpose and scope.—The Strategy
16	shall describe strategies for the Federal Govern-
17	ment, in partnership with non-Federal partners,
18	to address the vulnerabilities of the United States
19	to climate change described in the National Cli-
20	mate Assessment or other relevant analyses iden-
21	tified by the Chief Resilience Officer to ensure
22	that—
23	(i) the United States has an over-
24	arching strategic vision to respond to cli-
25	mate change that—

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 identified
6	under subclause (I) into relevant na-
7	tional programs, operations, and strat-
8	egies;
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 pro-
10	moting ecosystem resilience to preserve
11	the intrinsic value of nature and sup-
12	port ecosystem services relied on by
13	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 of
22	Freely Associated States are maximized to
23	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 re-
8	SPONSE TO CLIMATE CHANGE.—
9	(I) Addressing the limitations,
10	redundancies, and opportunities for
11	improved resilience operations of the
12	Federal Government that are identified
13	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 to
4	topics related to climate change vulner-
5	ability and resilience to promote effec-
6	tive Federal resilience operations.
7	(IV) An identification of opportu-
8	nities and appropriate circumstances
9	for represented agencies to better utilize
10	natural infrastructure as an adapta-
11	$tion\ strategy.$
12	(ii) Support of non-federal part-
13	NERS' RESPONSE TO CLIMATE CHANGE.—
14	(I) Methods for represented agen-
15	cies to better collaborate and work di-
16	rectly with non-Federal partners to in-
17	crease the resilience and adaptive ca-
18	pacity of State governments, local gov-
19	ernments, territorial governments, the
20	governments of Indian Tribes, the gov-
21	ernments of Freely Associated States,
22	and other non-Federal partners.
23	(II) Educating non-Federal part-
24	ners about the availability of Federal
25	funding opportunities identified in the

Operations Report under subsection 1 2 (d)(2)(B), including the development of 3 a centralized, cross-agency portal that 4 allows non-Federal partners to easily 5 identify and apply for appropriate 6 Federal funding opportunities for the 7 specific resilience needs of those non-8 Federal partners. 9 (III) Clarifying, simplifying, and 10 harmonizing the planning require-11 ments and application processes for 12 State governments, local governments, 13 territorial governments, the govern-14 ments of Indian Tribes, and the gov-15 ernments of Freely Associated States to 16 access Federal funds for climate adap-17 tation and resilience efforts across rep-18 resented agencies. 19 (IV) Identifying under-resourced 20 communities and communities with 21 low adaptive capacity and resilience 22 and to directly support those commu-23 nities in applying for Federal funds 24 for climate adaptation and resilience 25 efforts.

1	(V) Supporting the retreat or relo-
2	cation of human communities in areas
3	that are at increasing risk from cli-
4	mate change, in particular from slow-
5	onset climate hazards, including strate-
6	gies to better manage equitable prop-
7	erty buyouts, managed retreat, or relo-
8	cation options for communities in
9	those areas.
10	(iii) Climate information.—
11	(I) Increasing the accessibility
12	and utility of climate information that
13	is produced, published, or hosted by the
14	Federal Government, including strate-
15	gies to better collaborate across the rep-
16	resented agencies and work with non-
17	Federal partners—
18	(aa) to provide the high-qual-
19	ity, locally relevant climate infor-
20	mation and, where practicable
21	and useful, transparent and
22	replicable downscaled climate pro-
23	jections that are necessary to sup-
24	port local-level adaptation efforts;

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

1	mate information to better provide cli-
2	mate information to end users.
3	(IV) Developing the centralized
4	clearinghouse or dedicated Federal pro-
5	gram described in subclause (III), if
6	such an effort is determined to be nec-
7	essary by the Chief Resilience Officer.
8	(iv) Resilience metrics and indica-
9	TORS.—At the discretion of the Chief Resil-
10	ience Officer, developing or improving resil-
11	ience metrics and indicators to assist the
12	Federal Government and non-Federal part-
13	ners—
14	(I) to the maximum extent prac-
15	ticable, to consistently measure the re-
16	silience of human communities, nat-
17	ural systems, and physical assets to
18	$climate\ change;$
19	(II) to set baselines and targets to
20	measurably increase climate resilience
21	over time; and
22	(III) to better monitor and assess
23	the effectiveness of various resilience-
24	building activities after implementa-
25	tion.

1	(v) Funding climate adaptation.—
2	(I) Helping to prioritize Federal
3	funding expenditures for adaptation
4	and resilience in consideration of the
5	$greatest\ vulnerabilities.$
6	(II) Creating financial incentives
7	for adaptation and resilience efforts.
8	(III) A review of the cost-benefit
9	analysis methodologies and discount
10	rates used by represented agencies for
11	all Federal investments, including a
12	review of the implications of those
13	methodologies and discount rates for
14	climate adaptation and resilience.
15	(IV) Recommendations to improve
16	the methodologies described in sub-
17	clause (III) to reflect—
18	(aa) the added value of resil-
19	ience planning and construction
20	methodologies over the lifetime of
21	a project or unit of infrastructure;
22	(bb) the benefits of natural
23	infrastructure investments:

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

1	(III) To the greatest extent prac-
2	ticable, integrating social equity con-
3	siderations across all aspects of the
4	Strategy.
5	(2) Implementation plan.—Concurrently with
6	the Strategy and each update of the Strategy, the
7	Chief Resilience Officer and the Working Groups shall
8	jointly and simultaneously submit to the President
9	and Congress an Implementation Plan that describes
10	how represented agencies intend to carry out the
11	Strategy, which shall include—
12	(A) a description of the roles and respon-
13	sibilities of each represented agency in carrying
14	out each element of the Strategy described in
15	paragraph (1);
16	(B) a plan to enter into such interagency
17	agreements between and among represented agen-
18	cies, partnerships with non-Federal entities, and
19	other agreements for coordination between and
20	among the Federal Government and non-Federal
21	partners as may be necessary to facilitate a uni-
22	fied national plan to build resilience to climate
23	change; and
24	(C) the use of any relevant metrics and in-
25	dicators described in paragraph $(1)(E)(iv)$ .

- 1 (3) Assessment.—Not later than 2 years fol-2 lowing the completion of each Strategy under para-3 graph (1)(A) and each Implementation Plan, the 4 Comptroller General of the United States shall simul-5 taneously submit to the President and Congress a re-6 port that assesses—
  - (A) the extent to which the Strategy and Implementation Plan have been carried out by the Federal Government, which shall be judged, as appropriate, based on any metrics and indicators developed to track progress in increasing resilience under paragraph (1)(E)(iv);
  - (B) the effectiveness of the actions taken under the Strategy and Implementation Plan and the resulting outcomes of those actions in building national resilience to climate change; and
  - (C) the progress made towards the development of an effective whole-of-government effort to build resilience to the climate vulnerabilities described in the National Climate Assessment or other relevant analyses identified by the Chief Resilience Officer, including recommendations for additional steps necessary to reach this goal.

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1	(4) Public comment.—The Chief Resilience Of-
2	ficer shall—
3	(A) publish draft and final versions of the
4	Strategy and Implementation Plan, and each
5	update to the Strategy and Implementation
6	Plan; and
7	(B) through publication in the Federal Reg-
8	ister, solicit comments from the public on the
9	draft versions of the documents published under
10	subparagraph (A) for a period of 60 days, which
11	the Chief Resilience Officer and the Working
12	Groups shall consider before submitting final
13	versions of the Strategy and Implementation
14	Plan, and updates to the Strategy and Imple-
15	mentation Plan, to the President and Congress.
16	(f) Sunset.—This section ceases to be effective on the
17	date that is the earlier of—
18	(1) the date on which the Comptroller General of
19	the United States submits to the President and Con-
20	gress the third assessment report under subsection
21	(e)(3); and
22	(2) the date that is the last day of fiscal year
23	2033.

## Calendar No. 615

117th CONGRESS S. 3531

[Report No. 117-237]

## A BILL

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

December 12, 2022

Reported with an amendment