

Climate Adaptation-Related Laws: 115th-117th Congress (January 2017-December 2022)

115 th Congress (2017-2018)			
Law	Topics	Impacts	Description
Weather Research and Forecasting Innovation Act of 2017 H.R.353 Sponsor: Rep. Frank Lucas (R-Okla.) Public Law No: 115-25	Data Risk communication Warning systems Weather forecasting	Extreme weather events	<p>“Widely viewed as the first comprehensive weather authorization since the <i>NOAA Authorization Act</i> of 1992, the <i>Weather Research and Forecasting Innovation Act</i> of 2017 is leading the charge for improved forecast and warning systems to build a Weather-Ready Nation, as well as the integration of social science and unified modeling capabilities. NOAA’s research and development (R&D) goals directly impact its Weather-Ready Nation strategic goals by:</p> <ul style="list-style-type: none"> ● Improving the science behind extreme & severe weather events ● Developing better models, computing, and observations ● Including and embracing more social science to improve risk communication to the public.” <p>Source: National Oceanic and Atmospheric Administration</p>
Emergency Aid to American Survivors of Hurricanes Irma and Jose Overseas Act H.R.3732 Sponsor: Rep. David Reichert (R-Wash.) Public Law No: 115-57	Disaster relief Migration	Hurricanes	<p>“This bill amends title XI (General Provisions) of the <i>Social Security Act</i> to increase, from \$1 million to \$25 million, the maximum amount of temporary assistance that may be provided annually in FY2017-FY2018. (‘Temporary assistance’ refers to money payments, temporary lodging, transportation, and other goods and services necessary for the health and welfare of U.S. citizens and their dependents who return from a foreign country due to a crisis and are without available resources.)”</p> <p>Source: Congress.gov</p>
Disaster Tax Relief and Airport and Airway Extension Act of 2017 H.R.3823 Sponsor: Rep. Kevin Brady, Kevin (R-Texas) Public Law No: 115-63	Disaster relief Tax law	Hurricanes	<p>“The <i>Disaster Tax Relief and Airport and Airway Extension Act</i> of 2017 (P.L. 115-63) [...] provided tax relief to those affected by Hurricanes Harvey, Irma, and Maria in 2017”</p> <p>Source: Congressional Research Service</p>

<p>To require the Administrator of the Federal Emergency Management Agency to submit a report regarding certain plans regarding assistance to applicants and grantees during the response to an emergency or disaster H.R.1117 Sponsor: Rep. Vicky Hartzler (R-Mo.) Public Law No: 115-69</p>	<p>Disaster relief Planning Workforce</p>	<p>Not specified in description</p>	<p>“This bill directs the Federal Emergency Management Agency (FEMA) to report to Congress regarding its plans to provide: (1) consistent guidance to applicants on FEMA disaster funding procedures during the response to an emergency or disaster, (2) appropriate record maintenance and transfer of documents to new teams during staff transitions, and (3) accurate assistance to applicants and grantees to ease the administrative burden throughout the process of obtaining and monitoring assistance.”</p> <p>“The report must: (1) include a plan for implementing operating procedures and document retention requirements to ensure the maintenance of appropriate records throughout the life cycle of the emergency or disaster; and (2) identify new technologies to aid the disaster workforce in partnering with state, local, and tribal governments and private nonprofits in the wake of a disaster or emergency to educate, assist, and inform applicants on the status of their applications and projects.”</p> <p>Source: Congress.gov</p>
<p>National Defense Authorization Act for Fiscal Year 2018 H.R.2810 Sponsor: Rep. Mac Thornberry (R-Texas) Public Law No: 115-91</p>	<p>National security Federal buildings and installations Planning</p>	<p>Not specified in description</p>	<p>“Declaration of Direct Threat: ‘It is the sense of Congress that... climate change is a direct threat to the national security of the United States and is impacting stability in areas of the world both where the United States Armed Forces are operating today, and where strategic implications for future conflict exist...’ – Sec 335 (b)</p> <p>Report on DoD’s Most Vulnerable Bases: Sec 335 (c) required the DoD to identify the ten installations per service that were most vulnerable to climate change. In January 2019, DoD responded with a report on installation vulnerability without the prioritized list, so the military services followed up with their own individual submissions (Army, Navy/Marine Corps, Air Force).”</p> <p>Source: The Center for Climate and Security</p>
<p>John S. McCain National Defense Authorization Act for Fiscal Year 2019 H.R.5515 Sponsor: Rep. Mac Thornberry (R-Texas) Public Law No: 115-232</p>	<p>National security Energy systems Federal buildings and installations International relations Planning</p>	<p>Arctic ice melt Flooding Permafrost thaw Sea level rise</p>	<p>“Installation Resilience Provisions: Though the top ten lists of vulnerable installations from 2017 had not yet been developed, Congress proceeded with additional provisions strengthening installation resilience to climate impacts, including:</p> <ul style="list-style-type: none"> • Floodplain requirements on new military construction: Projects must identify whether they are in the 100-year floodplain, and if so, they must not only include mitigation plans, but be designed to assume an additional 2 feet above the base flood elevation (3 feet for mission critical facilities). This was originally a bipartisan stand-alone bill introduced by Senators Schatz, Moran, and Reed. (Sec 2805) • Incorporation of changing environmental conditions into Unified Facilities Criteria (i.e., military construction design requirements). (Sec 2805) • Inclusion of energy and climate considerations into installation master plans (which govern how a base is laid out and where new construction will occur). (Sec 2805) • A formal definition of military installation resilience that includes resilience to changes in

			<p>environmental conditions. (Sec 2805)</p> <ul style="list-style-type: none"> • Authority to expend Readiness and Environmental Protection Initiative funds to protect military installation resilience (Sec 312i) • Authority to spend economic adjustment funds on military installation resilience. (Sec 2805) • Expanding Defense Access Roads authority to improve critical roads outside a base that are impacted by sea-level rise and recurrent flooding. (Sec 2865) • Added \$48.4M to the Energy Resilience and Conservation Investment Program (Sec 2403) <p>Focus on the Melting Arctic: At the same time, Congress is paying increased attention to the security challenges posed by a warming Arctic. With Arctic ice rapidly melting, there is already more traffic through the region and the prospect of increased resource extraction. Key Arctic provisions in the NDAA include:</p> <ul style="list-style-type: none"> • Requiring an updated Arctic Strategy by June 2019. (Sec 1071) • Incorporation of China's Arctic activities into a new Strategy on China. (Sec 1261) • Authority to procure six new icebreakers for the Coast Guard, expressing the intent that they be in the inventory within 10 years. (Sec 151) • The bill provides \$15.5M for a replacement F-35 munitions maintenance facility at Eielson AFB, AK, as the existing facility suffered extensive damage from settlement caused by permafrost thaw. In response, the Senate Report also requires DoD to perform an assessment of all structures in permafrost regions to anticipate future building losses and to evaluate the adequacy of construction standards in these regions given anticipated warming." <p>Source: The Center for Climate and Security</p>
<p>Federal Aviation Administration Reauthorization Act of 2018 H.R.302 Sponsor: Rep Brett Guthrie (R-Ky.) Public Law No: 115-254</p>	<p>Building codes and standards</p> <p>Pre-disaster mitigation</p>	<p>Not specified in description</p>	<p>"[The <i>Disaster Recovery Reform Act</i>] has been called 'transformational' for focusing more federal investment in pre-disaster mitigation (PDM). PDM grants are intended to help individuals, communities and states invest in mitigation strategies such as elevating structures, adding safe rooms, and implementing the latest building codes and standards. DRRRA also includes funding for the National Public Infrastructure Pre-Disaster Hazard Mitigation fund, which will enable greater investment in public infrastructure mitigation before disaster strikes. And, the legislation makes an important change to existing law by allowing disaster-damaged structures to be rebuilt to the most recent model codes and standards."</p> <p>Source: Environmental and Energy Study Institute</p>
<p>America's Water Infrastructure Act of 2018 S.3021 Sponsor: Sen. Amy Klobuchar (D-Minn.)</p>	<p>Water</p>	<p>Not specified in description</p>	<p>"[<i>America's Water Infrastructure Act</i>] authorize appropriations for several drinking water and wastewater infrastructure programs for projects that promote compliance, address aging drinking water infrastructure and lead in school drinking water, and increase drinking water infrastructure resilience to natural hazards."</p> <p>"[AWIA will] improve the sustainability and resilience of small and disadvantaged communities' drinking water systems."</p>

Public Law No: 115-270			Source: Congressional Research Service
A bill to extend the effective date for the sunset for collateral requirements for Small Business Administration disaster loans S.3554 Sponsor: Sen. John Kennedy (R-La.) Public Law No: 115-280	Disaster Small businesses	Not specified in description	“Under current law, the Small Business Administration (SBA) does not require collateral for loans of \$25,000 or less under its disaster loan program. That threshold reverts to \$14,000 on November 25, 2018, for home or business loans for nonmajor physical disasters. S. 3554 would extend the \$25,000 threshold for those loans for one year.” Source: Congressional Budget Office
Agriculture Improvement Act of 2018 H.R.2 Sponsor: Rep. Michael Conaway (R-Texas) Public Law No: 115-334	Agriculture Conservation	Drought Erosion Flooding	“The Farm Bill’s federal crop insurance program will now allow — rather than discourage — greater use of cover crops, a practice that has well-proven climate and water quality benefits ... The Conservation title of the bill contains a number of programs that will help curb climate change. This title continues to provide about \$6 billion annually to the Conservation Reserve Program, the Environmental Quality Incentives Program (EQIP), and the Conservation Stewardship Program, all of which saw modest improvements in the 2018 Farm Bill.” Source: Earthjustice
National Integrated Drought Information System Reauthorization Act of 2018 S.2200 Sponsor: Sen. John Thune (R-S.D.) Public Law No: 115-423	Agriculture Data Planning	Drought	“Recommends funding for the National Oceanic and Atmospheric Administration’s National Integrated Drought Information System (NIDIS) to increase from \$13.5 million in fiscal year 2019 to \$14.5 million in fiscal year 2023 <ul style="list-style-type: none"> ■ Authorizes NIDIS to engage in partnerships with the private sector, academic institutions, and citizen scientists ■ Recommends funding for NOAA activities relating to weather and climate information in agriculture to increase from \$26.5 million in fiscal year 2019 to \$28.5 million in fiscal year 2023 ■ Directs NOAA to develop a strategy for a national soil moisture monitoring network.” Source: American Institute of Physics
Water Infrastructure Improvement Act H.R.7279 Sponsor: Rep. Bob Gibbs (R-Ohio) Public Law No: 115-436	Green infrastructure Water	Stormwater	“This bill amends the <i>Federal Water Pollution Control Act</i> (commonly known as the Clean Water Act) to allow municipalities to develop a plan that integrates wastewater and stormwater management. A permit for a municipal discharge under the national pollutant discharge elimination system that incorporates an integrated plan may integrate all requirements under the Act addressed in the plan, such as requirements relating to combined sewer overflows, sanitary sewer collection systems, and total maximum daily loads. A plan that is incorporated into a permit may include the implementation of green infrastructure and projects to reclaim, recycle, or reuse water. Green infrastructure includes measures that mimic natural processes to store, reuse, or

			<p>reduce stormwater.”</p> <p>Source: Congress.gov</p>
<p>Tropical Forest Conservation Reauthorization Act of 2018 S.1023 Sponsor: Sen. Rob Portman (R-Ohio) Public Law No: 115-440</p>	<p>Conservation</p> <p>Coral reef</p> <p>Debt-for-Nature swaps</p> <p>Tropical forests</p>	<p>Not specified in description</p>	<p>“The <i>Tropical Forest Conservation Act</i> is best known for the program’s ‘debt-for-nature’ swaps. Through these swaps, countries are able to redirect funds that would have otherwise gone to the U.S. in the form of debt repayments to instead support local organizations working to conserve tropical forests.”</p> <p>“The 2018 iteration of TFCA not only reauthorized appropriations for the implementation of this successful program but also expanded its scope to include coral reef ecosystems. Coral reefs are home to a quarter of marine life, including commercially important species. Healthy reefs, according to a study conducted by The Nature Conservancy, also attract \$36 billion annually in tourism revenues.”</p> <p>Source: The International Conservation Caucus Foundation</p>
<p>116th Congress (2019-2020)</p>			
<p>John D. Dingell, Jr. Conservation, Management, and Recreation Act S.47 Sponsor: Sen. Lisa Murkowski (R-Alaska) Public Law No: 116-9</p>	<p>Conservation</p> <p>Public lands</p> <p>Wetlands</p> <p>Workforce</p>	<p>Not specified in description</p>	<p>“Originally passed in 1965, [the Land and Water Conservation Fund] devotes a portion of revenues from offshore oil and gas extraction leases to fund a massive variety of public access to public lands programs nationwide.” This law permanently reauthorizes the Land and Water Conservation Fund.</p> <p>“A 21st Century Conservation Service Corps will be established, which will create programs where kids and veterans will work to restore national parks and other public lands.”</p> <p>Source: Outside Magazine</p>
<p>Colorado River Drought Contingency Plan Authorization Act H.R.2030 Sponsor: Rep. Raúl Grijalva (D-Ariz.) Public Law No: 116-14</p>	<p>Contingency plan</p> <p>River system</p>	<p>Drought</p>	<p>“The <i>Colorado River Drought Contingency Plan Authorization Act</i> ... requires the Department of the Interior to execute the Colorado River Drought Contingency Plan without delay and operate applicable Colorado River System reservoirs accordingly.”</p> <p>Source: National Oceanic and Atmospheric Administration</p>
<p>To amend section 327 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act to</p>	<p>Disaster relief</p> <p>Workforce</p>	<p>Not specified in description</p>	<p>“This bill amends the <i>Robert T. Stafford Disaster Relief and Emergency Assistance Act</i> to specify that National Urban Search and Rescue Response System task forces may include federal employees.”</p> <p>Source: Congress.gov</p>

<p>clarify that National Urban Search and Rescue Response System task forces may include Federal employees H.R.639 Sponsor: Rep. Vicky Hartzler (R-Mo.) Public Law No: 116-48</p>			
<p>Rebuilding Small Businesses After Disasters Act S.862 Sponsor: Sen. John Kennedy (R-La.) Public Law No: 116-70</p>	<p>Disaster relief Small businesses</p>	<p>Not specified in description</p>	<p>“The bill extends provisions that will help homeowners and small businesses access certain U.S. Small Business Administration (SBA) loans.” Source: Office of Senator Marco Rubio</p>
<p>National Defense Authorization Act for Fiscal Year 2020 S.1790 Sponsor: Sen. James Inhofe (R-Okla.) Public Law No: 116-92</p>	<p>Building codes and standards Energy systems Federal buildings and installations National security Planning</p>	<p>Flooding Sea level rise</p>	<p>“Military Installation Resilience Plans: The bill directs DoD to incorporate military installation resilience into its installation’s Master Plans, specifically to assess vulnerabilities both to installations and surrounding communities, identify missions that would be affected by those vulnerabilities, and propose projects to address those vulnerabilities. (Sec 2801a)</p> <p>Resilient Construction Requirements: The bill includes a requirement for Improved Building Codes, called Unified Facilities Criteria in DoD, to promote resilience in new construction. (Sec 2804)</p> <p>Climate Handbook Required: The bill includes a requirement for use of the Navy’s Climate Change Installation Adaptation and Resilience planning handbook by the entire DoD, ensuring that guidance is available for all installation officials that pursue resilience measures. (Sec 2804)</p> <p>Projecting Sea Level Rise: The bill extends restrictions on construction in floodplains to cover projected sea level rise over the projected life of a building. (Sec 2806)</p> <p>Climate Vulnerability Tool: The NDAA includes direction to Create a Climate Vulnerability and Risk Assessment Tool by DoD to inform mitigation planning and infrastructure development. (Sec 326)</p> <p>Arctic Port Study: It also includes direction to DoD to Consider Sites for a Strategic Port in the Arctic, with a report due in 180 days. (Sec 1752)</p> <p>Defense Access Roads: Made additional changes related to addressing the impacts of current or anticipated changes in environmental conditions, and expanded scope to include roads to air or</p>

			<p>sea ports necessary for deployment. (Sec 2808)</p> <p>Funding for Climate Resilience Projects: The bill also provides some funding to address climate change concerns. Specifically, it includes a \$49 million project at the Portsmouth (VA) Naval Shipyard to increase the height of floodwalls around its drydocks, driven by sea-level rise concerns, and authorizes \$150 million for the Energy Resilience and Conservation Investment Program, which addresses projects at multiple locations. Much greater investments in climate resilience will be needed in the future, but this is an encouraging start.</p> <p>Creation of a Climate and Security Council in the Intelligence Community: Finally, the bill incorporated the <i>Intelligence Authorization Act</i>, which included a provision that Creates a Climate and Security Council within the Intelligence Community to ensure that intelligence analysis is informed by the best possible science and projections (Sec 5321). This is highly consistent with the recommendation in the Climate Security Plan for America for a Climate Security Crisis Watch Center, led by the Office of the Director of National Intelligence, to facilitate an annual interagency assessment, drawing from analysis across the intelligence community and beyond, of the risks that climate change poses to U.S. national security.”</p> <p>Source: The Center for Climate and Security</p>
<p>Great American Outdoors Act H.R.1957 Sponsor: Rep. John Lewis (D-Ga.) Public Law No: 116-152</p>	<p>Conservation Public Lands</p>	<p>Not specified in description</p>	<p>“The <i>Great American Outdoors Act</i> (GAOA Act) is a historic investment in the protection and sustainment of our public lands and Bureau of Indian Education (BIE)-funded schools. The Act established the National Parks and Public Land Legacy Restoration Fund (LRF) to address overdue maintenance needs. GAOA also permanently authorized funding for the Land and Water Conservation Fund (LWCF) — a separate fund aimed at safeguarding our natural areas and cultural heritage.”</p> <p>Source: U.S. Department of the Interior</p>
<p>America's Conservation Enhancement Act S.3051 Sponsor: Sen. John Barrasso (R-Wyo.) Public Law No: 116-188</p>	<p>Conservation Wetlands</p>	<p>Not specified in description</p>	<p>“The <i>America’s Conservation Enhancement Act</i> includes several conservation provisions that leverage public and private funding to advance conservation. The bill reauthorizes the <i>North American Wetlands Conservation Act</i>, the National Fish and Wildlife Foundation and the Chesapeake Bay Program. Under the bill, <i>the North American Wetlands Conservation Act</i> (NAWCA), which has helped conserve more than 30 million acres of wetlands by leveraging a 3-to-1 match of private to federal funds, would increase its authorized level to \$60 million annually for the next five years. In recent years, NAWCA has received around \$45 million in funding each year from Congress.”</p> <p>Source: The Wildlife Society</p>
<p>Digital Coast Act S.1069 Sponsor: Sen. Tammy Baldwin (D-Wis.)</p>	<p>Data</p>	<p>Not specified in description</p>	<p>“Specific Requirements in the Legislation Include</p> <ul style="list-style-type: none"> • Filling data information gaps, including coastal elevation, land use and land cover, critical infrastructure, socioeconomic and human use, structures, living resources and habitat, cadastral, and aerial imagery.

<p>Public Law No: 116-223</p>			<ul style="list-style-type: none"> • Developing publicly available tools that integrate various data products, including marine economy data, to help communities make the right decisions. • Providing greater focus on underserved areas, including Alaska. • Documenting best practices in product and service delivery for other federal agencies interested in the Digital Coast approach.” <p>Source: National Oceanic and Atmospheric Administration</p>
<p>Coordinated Ocean Observations and Research Act of 2020 S.914 Sponsor: Sen. Roger Wicker (R-Miss.) Public Law No: 116-271</p>	<p>Data Research</p>	<p>Algal blooms Hypoxia Ocean acidification</p>	<p>“The <i>Coordinated Ocean Observations and Research Act</i> reauthorized the Integrated Coastal and Ocean Observation System (IOOS) and it also amended the <i>Federal Ocean Acidification Research and Monitoring Act</i> of 2009, the law that oversees the country’s response to ocean acidification. Specifically, the legislation asks for regular reports on coastal community vulnerability to ocean acidification that also identify gaps in monitoring and research. It also creates a mechanism to increase engagement and input on ocean acidification monitoring by stakeholders such as coastal resource managers and aquaculture industry members. It calls for further research by the National Science Foundation on ocean acidification impacts, technology and other ocean stresses, including hypoxia (when the ocean has too little oxygen) and harmful algal blooms.”</p> <p>Source: Ocean Conservancy</p>
<p>William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021 H.R.6395 Sponsor: Rep. Adam Smith (D-Wash.) Public Law No: 116-283</p>	<p>Energy systems Federal buildings and installations National security Planning</p>	<p>Desertification Drought Extreme weather Flooding Stormwater Wildfires</p>	<p>“Climate Impacts on Mission: Notably, Congress incorporated the <i>National Security Climate Resilience Act</i> into the measure, focused on mainstreaming climate and assessing the impacts of climate on operational missions, not just installations. Provisions included:</p> <ul style="list-style-type: none"> • Requirement for DoD to conduct Climate Resilience Mission Impact Assessments to assess the implications not only on installations but on operations and warfighting capability. (Sec 334 / CSPA 2.3) • Requirement for a threat assessment of the impacts of extreme weather, drought, and desertification on regional stability. (Sec 334) • Requirement for the Office of Net Assessment to conduct a long-term assessment of the implications of climate change on DoD. (Sec 334 / CSPA 2.3) • Requirement for the development of wargames and exercises focused on climate-driven crises. (Sec 334 / CSPA 2.3) • Requirement for DoD to analyze climate risks to the deployment of forces—specifically assessing impacts to the strategic highway and rail networks and strategic air and seaports. (Sec 334) • Requirement for a review of the research and development needed to ensure resilience of military equipment and capabilities to future climate conditions. (Sec 334 / CSPA 2.5) • Requirement for a review and enhancement of existing authorities for using Air Force and Air National Guard airborne firefighting systems and other DoD assets to fight wildfires. (Sec 1065) <p>Improving Installation Resilience:</p> <ul style="list-style-type: none"> • Requirement for DoD to develop a framework for installation commanders to engage with local communities to improve preparation for and response to extreme weather and

			<p>climate events. (Sec 332)</p> <ul style="list-style-type: none"> • Requirement for DoD to ensure at least 10 percent of major military installations achieve energy net-zero and water or waste net-zero by fiscal year 2035. (Sec. 319) • Established a new program administered by the Office of Local Defense Community Cooperation (OLDCC) to make grants, conclude cooperative agreements, and supplement other federal funds for planning and implementing projects to maintain or improve military installation resilience. (Sec 313) • Established a new program for projects on and outside installations to manage increasing stormwater impacts. (Sec 2803) • Extended existing installation resilience programs focused on facilities to DoD testing and training ranges. (Sec. 332) • Requirement for each Secretary of a military department to identify at least two major military installations at risk from extreme weather events within 30 days of enactment, and to ensure that resilience plans are complete for those installations within one year. (Sec 2833) • Requirement for DoD to perform detailed assessments of the climate vulnerabilities of installations to climate change. (Sec 335 / CSPA 2.2) • Strengthened requirements to address the risks of flooding. (Sec 2805)” <p>Source: The Center for Climate and Security</p>
<p>STORM Act S.3418 Sponsor: Sen. Gary Peters (D-Mich.) Public Law No: 116-284</p>	<p>Revolving loan fund Pre-disaster mitigation</p>	<p>Erosion Flooding Extremes in water levels</p>	<p>“[The] <i>STORM Act</i> amends the <i>Robert T. Stafford Disaster Relief and Emergency Assistance Act</i> to grant the Federal Emergency Management Agency (FEMA) authority to work with states and Indian tribal governments to establish revolving loan funds for mitigation. The revolving loan funds will be used by local governments to carry out projects that reduce natural disaster risk, including shoreline erosion, flooding and high water level.”</p> <p>Source: Office of U.S. Senator Gary Peters</p>
<p>Great Lakes Restoration Initiative Act of 2019 H.R.4031 Sponsor: Rep. David Joyce (R-Ohio) Public Law No: 116-294</p>	<p>Conservation Water</p>	<p>Erosion Extremes in water levels Extreme weather events</p>	<p>“The Great Lakes and its watersheds continue to be stressed by contamination and threats to water quality, and are under increasing pressure from new invasive species, climate change, extremes in water levels, intense storms, erosion, and habitat destruction. The GLRI Act of 2019 ensures that vital efforts to protect our water can continue and that we can address new and emerging threats to our lakes and waterways.”</p> <p>Source: Office of U.S. Senator Debbie Stabenow</p>
<p>National Landslide Preparedness Act H.R.8810 Sponsor: Suzan DelBene (D-Wash.)</p>	<p>Data Emergency preparedness Planning</p>	<p>Landslides</p>	<p>“The legislation will improve emergency preparedness and planning by targeting key gaps in current science and mapping, which are critical to understanding landslide hazards and risks.</p> <p>The <i>National Landslide Preparedness Act</i> establishes a National Landslide Hazards Reduction Program at the U.S. Geological Survey (USGS) to better identify and understand landslide risks, protect communities, save lives and property, and improve emergency preparedness.</p>

<p>Public Law No: 116-323</p>			<p>The bill also codifies USGS' 3D Elevation Program to update and coordinate the collection of elevation data across the country using enhanced, high-resolution surveys. Enhanced elevation data helps communities plan for and respond to natural hazards and provides critical data to inform decision-making for public safety, national security, infrastructure, transportation, agriculture, and natural resource management.”</p> <p>Source: Senate Committee on Energy and Natural Resources</p>
<p>Protect and Restore America's Estuaries Act H.R.4044 Sponsor: Rep. Tom Malinowski (D-N.J.) Public Law No: 116-337</p>	<p>Conservation Wetlands</p>	<p>Biodiversity loss Land loss</p>	<p>“The act reauthorizes appropriations for the National Estuary Program until 2026 and nearly doubles the annual funding authorization.</p> <p>It also expands the range of supporting projects which would qualify for grants and recognizes the increasing threats towards estuaries such as pollution, accelerated land loss, and risks to biodiversity.”</p> <p>Source: Restore America's Estuaries</p>
<p>117th Congress (2021-2022)</p>			
<p>American Rescue Plan Act of 2021 H.R.1319 Sponsor: Rep. John Yarmuth (D-Ky.) Public Law No: 117-2</p>	<p>Disaster relief Workforce</p>	<p>Wildfires</p>	<p>The law includes funding for a Disaster Relief Fund, Assistance to Firefighter Grants, Emergency Management Performance Grants, and Environmental Justice Grants.</p> <p>Source: National Association of Counties</p>
<p>Infrastructure Investment and Jobs Act H.R.3684 Sponsor: Rep. Peter DeFazio (D-Ore.) Public Law No: 117-58</p>	<p>Building codes and standards Energy systems Planning Pre-disaster mitigation Transportation Water</p>	<p>Flooding Wildfires</p>	<p>“Express resilience funding features of IIJA include:</p> <p>Transportation:</p> <ul style="list-style-type: none"> Over \$16 billion dedicated to transportation resiliency through programs such as the new Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT) grant program and the Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Program (formerly known as BUILD and TIGER). \$500 million dedicated to cool pavements, porous pavements, and tree cover expansion through the new USDOT Healthy Streets Program. Existing USDOT formula and emergency relief funding programs are also better integrating resilience into program purposes and eligibility as a result of IIJA. <p>Energy, Buildings, & Development:</p> <ul style="list-style-type: none"> Several new Department of Energy grant programs designed to improve the resilience and reliability of the electric grid and ‘to enable sustained cost-effective implementation of updated building energy codes.’ Funding to improve recycling programs, to help businesses adopt pollution prevention practices, and for the Low Income Home Energy Assistance Program (LIHEAP).

			<p>Natural Resources, Ecosystems, & Agriculture:</p> <ul style="list-style-type: none"> • Over \$3B for programs related to specific important regional ecosystems (e.g., watershed regions) and related programs (e.g., the Coastal Zone Management Program). • Over \$8B provided for wildfire management activities across multiple federal agencies (USFS, DOI, USDA, and others) including fuels reduction projects, state and private grants for fuel reduction efforts and fire assistance, restoration efforts, and more. <p>Water Infrastructure:</p> <ul style="list-style-type: none"> • Amendments to Section 1459A of the <i>Safe Drinking Water Act</i> (Assistance for Small and Disadvantaged Communities, 42 U.S.C. 300j–19a), which includes requiring the Environmental Protection Agency to create a competitive grant pilot program for underserved communities for projects that assist water public systems. • Historic levels of funding for water infrastructure including for State Revolving Fund programs and a new clean water infrastructure resilience and sustainability grant program administered by EPA. <p>Coastal Protection:</p> <ul style="list-style-type: none"> • Over \$12 billion for flood mitigation resiliency efforts across multiple federal agencies including Army Corps of Engineers, NOAA, and FEMA. <p>Preparedness & Emergency Response:</p> <ul style="list-style-type: none"> • \$1 billion (\$200 million each year for fiscal years 2022-2024) for the existing FEMA Building Resilient Infrastructure and Communities (BRIC) Program. • \$500 million for hazard mitigation revolving loan funds authorized by the <i>STORM Act</i>.” <p>Source: Georgetown Law</p>
<p>National Defense Authorization Act for Fiscal Year 2022 S.1605 Sponsor: Sen. Rick Scott (R-Fla.) Public Law No: 117-81</p>	<p>National security Planning</p>	<p>Not specified in description</p>	<p>“This year’s bill includes multiple provisions aimed at mainstreaming, or integrating, climate change into multiple DoD processes. For example, the bill codifies the <i>National Security Climate Resilience Act</i> (Sec. 331-335 of the bill), which directs DoD to incorporate climate resilience into acquisition; budgeting, planning and execution; infrastructure planning and sustainment; force development; engagement strategy development and security assistance. This section of the bill also directs DoD to conduct mission impact assessments (recommendation 2.3 in [the Center for Climate and Security’s Climate Security Plan for America] (CSPA)), to evaluate the implications of climate change on readiness, training, testing, and operations; and to use those assessments to support development of Combatant Commander requirements.</p> <p>Another example of mainstreaming is the direction (Sec. 311) for DoD to incorporate military installation resilience, including to climate change, into the National Defense Strategy (CSPA 1.3) and other key strategic documents such as Combatant Command plans (CSPA 4.8).”</p> <p>Source: The Center for Climate and Security</p>
<p>South Florida Clean Coastal Waters Act of 2021 S.66</p>	<p>Planning</p>	<p>Algal blooms</p>	<p>“[The <i>South Florida Clean Coastal Waters Act</i> of 2021] would amend the <i>Harmful Algal Bloom and Hypoxia Research and Control Act</i> of 1998 to direct the interagency task force on harmful algal blooms to develop and submit to the Congress within three years a plan to reduce, mitigate, and control harmful algal blooms in southern Florida. The plan would be based on interim</p>

<p>Sponsor: Sen. Marco Rubio (R-Fla.) Public Law No: 117-144</p>			<p>assessments also required under the bill. The interagency task force includes the National Oceanic and Atmospheric Administration, the Environmental Protection Agency, the Department of the Interior, the Department of Agriculture, and other agencies.”</p> <p>Source: Congressional Budget Office</p>
<p>Inflation Reduction Act of 2022 H.R.5376 Sponsor: Rep. John Yarmuth (D-Ky.) Public Law No: 117-169</p>	<p>Agriculture Conservation Nature-based solutions Pre-disaster mitigation</p>	<p>Drought Extreme heat Urban heat island Wildfires</p>	<p>“The <i>Inflation Reduction Act</i> addresses the fact that climate change can accelerate wildfires, and also the importance of trees and forests for carbon sequestration and climate change mitigation. Among other forestry provisions:</p> <ul style="list-style-type: none"> • The Act includes \$2.15 billion for National Forest System land restoration and fuel reduction, with a particular focus on ‘the wildland-urban interface.’ Fires in these areas present the most significant danger to human health and safety. • This \$2.15 billion includes \$50 million ‘for the protection of old growth forests on National Forest System land and to complete an inventory of old-growth forests and mature forests within the National Forest System.’ Woodwell research has shown that old growth forests are critically important for carbon sequestration. • The Act also includes \$550 million for grant programs dedicated to non-federal forest landowners. This includes: <ul style="list-style-type: none"> ○ \$150 million for a grant program that will support ‘a cost share to carry out climate mitigation or forest resilience practices in the case of underserved forest landowners.’ ○ \$250 million for grants that will help underserved forest landowners or landowners of forest lots less than 2,500 acres participate in emerging carbon markets. • \$1.5 billion over nine years for grants that will drive urban and community forestry projects and \$700 million for the Forest Legacy Program. <p>Among other conservation and agricultural provisions, the Act includes:</p> <ul style="list-style-type: none"> • More than \$20 billion in overall funding to help farmers mitigate climate change, including significant funding for ‘agricultural conservation practices’ that ‘directly improve soil carbon, reduce nitrogen losses, or reduce, capture, avoid, or sequester carbon dioxide, methane, or nitrous oxide emissions, associated with agricultural production.’ • \$1.3 billion for the Natural Resources Conservation Service to provide technical assistance and collect field-based data on greenhouse gas emissions associated with agricultural practices. <p>The <i>Inflation Reduction Act</i> recognizes the current and increasing physical hazards presented by climate change, and the fact that many communities are not prepared for climate change impacts.</p> <p>The <i>Inflation Reduction Act</i> provides \$3 billion in Environmental and Climate Justice Block Grants. Among the eligible uses of this funding are ‘mitigating climate and health risk from urban</p>

			<p>heat islands, extreme heat, wood heater emissions, and wildfire events,’ as well as general ‘climate resiliency and adaptation.’</p> <p>The bill includes \$4 billion to increase drought resilience in the Western United States.”</p> <p>Source: Woodwell Climate Research Center</p>
<p>CREW Act S.2293 Sponsor: Sen. Gary Peters (D-Mich.) Public Law No: 117-178</p>	<p>Disaster relief Workforce</p>	<p>Not specified in description</p>	<p>“The <i>Civilian Reservist Emergency Workforce (CREW) Act</i> of 2021 ... amends the <i>Robert T. Stafford Disaster Relief and Emergency Assistance Act</i> as well as the <i>Uniformed Services Employment and Reemployment Rights Act (USERRA)</i> to protect civilian employment of FEMA Reservists when they are deployed to disasters and emergencies, or training for such, on behalf of FEMA. The new law also protects FEMA Reservists from discrimination by an employer on the basis of membership, application for membership, and/or performance of service, as a FEMA Reservist.”</p> <p>Source: FEMA</p>
<p>Small Project Efficient and Effective Disaster Recovery Act H.R.5641 Sponsor: Rep. Sam Graves (R-Mo.) Public Law No: 117-189</p>	<p>Disaster relief</p>	<p>Not specified in description</p>	<p>“[The <i>Small Project Efficient and Effective Disaster Recovery Act</i>] updates what the Federal Emergency Management Agency (FEMA) considers a “small project” under the Stafford Act to \$1 million. This is the first adjustment in nearly three decades and reflects inflation and rising repair costs. Increasing the small project threshold allows communities to recover faster and allows FEMA to focus more of their time and resources on larger, more complex projects that represent 90% of disaster costs.”</p> <p>Source: Office of Representative Daniel Webster</p>
<p>Disaster Resiliency Planning Act S.3510 Sponsor: Sen. Gary Peters (D-Mich.) Public Law No: 117-221</p>	<p>Federal buildings and installations Pre-disaster mitigation</p>	<p>Extreme weather events</p>	<p>“[The <i>Disaster Resiliency Planning Act</i>] requires federal agencies to take disaster resiliency into account when investing in and managing federal property and assets. The legislation builds off of a 2021 report from the Government Accountability Office (GAO), which found that over the past five years, the government spent billions of dollars to repair federal property damage resulting from natural disasters. As extreme weather events become more frequent, the bill will help ensure that federal property – such as hospitals, research centers, offices, and roads and bridges – can withstand worsening natural disasters and help save taxpayer dollars.”</p> <p>Source: U.S. Senate Committee on Homeland Security and Governmental Affairs</p>
<p>Disaster Assistance for Rural Communities Act S.1617 Sponsor: Sen. James Risch (R-Idaho)</p>	<p>Disaster relief Rural communities Small businesses</p>	<p>Not specified in description</p>	<p>“Amid intensifying climate impacts across the country, the U.S. Small Business Administration is resolved to serve people whose lives and livelihoods are affected by disaster.</p> <p>The <i>Disaster Assistance for Rural Communities Act</i> creates a path forward to empower the SBA on its mission to quickly and efficiently help rural communities. As we know too well, disasters can disproportionately impact rural communities because it is often harder for those areas to access direct federal assistance available to individuals and businesses.”</p>

<p>Public Law No: 117-249</p>			<p>Source: U.S. Small Business Administration</p>
<p>FIRE Act S.3092 Sponsor: Sen. Alex Padilla (D-Calif.) Public Law No: 117-251</p>	<p>Emergency preparedness</p>	<p>Wildfires</p>	<p>“The <i>FIRE Act</i> will update the Stafford Act that governs the Federal Emergency Management Agency (FEMA) to improve its wildfire preparedness and response programs such as by looking at pre-deployment of assets during times of highest wildfire risk and red flag warnings and by increasing equity and consistency across multiple FEMA assistance programs.”</p> <p>Source: Office of Representative Jared Huffman</p>
<p>Community Disaster Resilience Zones Act of 2022 S.3875 Sponsor: Sen. Gary Peters (D-Mich.) Public Law No: 117-255</p>	<p>Data Planning Technical assistance</p>	<p>Not specified in description</p>	<p>“The bill would create a hazard assessment rating system for census tracts across the country and designate the area in each state with the highest hazard rating as a community disaster resilience zone, allowing for greater technical, planning, and financial assistance for disaster resilience and mitigation projects in such areas” (1).</p> <p>“This bill establishes a new [Community Disaster Resilience Zone] classification for communities that are simultaneously at high-risk of natural disaster and have low community resources. The bill recognizes that for communities to be resilient, we must consider factors that will impact their ability to recover, including social vulnerability and lower financial resources. If classified as a CDRZ community, the community will be eligible for additional federal cost-sharing support and technical assistance as it relates to local resilience planning and development. The bill also requires FEMA to maintain and update the National Risk Index, which will be utilized to identify and designate CDRZ communities that are most in need” (2).</p> <p>Sources: (1) National Low Income Housing Coalition, (2) The American Institute of Architects</p>
<p>James M. Inhofe National Defense Authorization Act for Fiscal Year 2023 H.R.7776 Sponsor: Rep. Peter DeFazio (D-Ore.) Public Law No: 117-263</p>	<p>Energy systems Federal buildings and installations National security Planning</p>	<p>Flooding</p>	<p>“In the Fiscal Year 2023 budget DoD requested \$3.1 billion in climate investments, focused on installation resilience and increasing operational efficiencies. The FY23 NDAA largely approved those requests, and even included modest increases in some resilience programs like the Defense Community Investment Program, the Energy Resilience and Conservation Investment Program and the Readiness and Environmental Protection Integration Program.</p> <p>As in previous years, Members of Congress included many additional provisions addressing climate change and resilience, energy resilience and sustainability, and international climate collaboration. Key climate change and resilience provisions include:</p> <ul style="list-style-type: none"> ■ Authorizing the creation of a Center of Excellence in Environmental Security (Sec 311); ■ Directing the Military Departments to select one of their installations to become an Energy Resilience Testbed where new energy technologies will be piloted (Sec 322); ■ Imposing a restriction holding back half of OSD’s funds until the military installation resilience plans required in last year’s bill are completed (Sec 2832); ■ Establishing a pilot wherein the DoD would establish interagency resiliency

			<p>coordinators in various regions of the nation (Sec 2872); and</p> <ul style="list-style-type: none"> ■ Requiring a report on the Department’s progress updating the flood maps for its installations.” <p>Source: The Center for Climate and Security</p>
<p>Great Lakes Fish and Wildlife Restoration Reauthorization Act of 2022 H.R.5973 Sponsor: Rep. Debbie Dingell (D-Mich.) Public Law No: 117-287</p>	<p>Conservation</p>	<p>Not specified in description</p>	<p>“[The <i>Great Lakes Fish and Wildlife Restoration Reauthorization Act</i> of 2022] reauthorizes \$6 million annually through 2027 for the U.S. Fish and Wildlife Service (USFWS) to partner with other federal agencies, states, and tribes to conserve, restore and manage fish and wildlife resources.”</p> <p>Source: Office of Senator Amy Klobuchar</p>
<p>FLOODS Act S.558 Sponsor: Sen. Roger Wicker (R-Miss.) Public Law No: 117-316</p>	<p>Data</p> <p>Research</p> <p>Risk communication</p> <p>Water</p> <p>Workforce</p>	<p>Flooding</p>	<p>“[The <i>FLOODS Act</i>] directs the National Oceanic and Atmospheric Administration to establish a ‘National Integrated Flood Information System’ to improve flood monitoring and forecasting and issue early warnings.</p> <p>[The Act] directs NOAA to conduct an assessment of the National Weather Service’s flash flood watches and warnings that focuses on risk communication.</p> <p>[The Act] establishes an interagency committee to identify research priorities, improve data management, support workforce development, and develop plans for water-related infrastructure investments.</p> <p>[The Act] establishes a fellowship program in hydrologic research that places graduate students in positions in federal agencies for up to two years, with preference for students from minority-serving institutions.”</p> <p>Source: American Institute of Physics</p>

Methodology: EESI reviewed the title and committee of jurisdiction of every piece of legislation signed into law in the 115th-117th Congresses using [Congress.gov](#). We pulled each law that had potential relevance to adaptation. We then reviewed the summary of each of those laws along with a third-party source to assess if the law did indeed include climate adaptation-related provisions. We excluded extensions of NFIP and budget and appropriations laws. It is possible that this analysis did not capture all adaptation-related legislation. For example, because the [Water Resources Development Act of 2020](#) was passed as part of an omnibus appropriations and authorization act, it does not appear here. The "Topics" and "Impacts" columns were generated by the review described above. They are designed to help organize the laws, but are not comprehensive.