We are pleased to share with the House Select Committee on the Climate Crisis policy recommendations compiled and refined by the members of the American Society of Adaptation Professionals (ASAP). The following document represents both specific policy recommendations and the aspirational ideas that will be necessary to prepare our economies, communities, and environment for a changing climate.

ASAP members contribute leadership and expertise to the resilience and preparedness fields. Accordingly, we would be delighted to provide additional input regarding the urgent need to direct budget and leadership to critical resilient infrastructure policies and programs across our country. In addition to encouraging strong federal leadership, we offer our expertise on the implementation of programs that can enhance the security of infrastructure, improve public health, bolster local, regional and national economies, and lead to sweeping approval and bi-partisan support.

ASAP members bring to their work the highest professional and ethical standards. The considerable years of practical experience represented by our membership has taught us the need for inclusive, authentic stakeholder engagement in concert with the best science and technical expertise. We look forward to working with the House Select Committee staff and members to implement these policy recommendations. Please don’t hesitate to let us know how we can be of service to the Committee.

Sincerely,

Beth Gibbons
American Society of Adaptation Professionals Executive Director

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The current and escalating impacts from climate change threaten the health and well-being of all Americans. As a new field of practice, climate change adaptation requires new resources and approaches for assessing and reducing vulnerabilities, sharing information, and overcoming jurisdictional and sectoral barriers to achieve collective resilience. With over 1400 members representing 598 organizations, the American Society of Adaptation Professionals (ASAP) offers collective expertise covering all facets of this rapidly evolving field including risk management, community-based resilience planning and implementation, economic revitalization, and disaster preparedness.

Given our expertise, we are responding to the questions in the Committee’s RFI that most directly target adaptation. We begin by highlighting several critical cross-cutting themes, with more detailed policy recommendations in response to the committee’s specific questions below. We would be happy to meet with the committee to provide additional input.

- **Mainstream climate.** Evaluate all federal projects and policies through a climate lens that includes social equity and ecological integrity.
  - Integrate climate considerations into existing agencies and policies to the greatest extent possible.
  - Reform and fill gaps where necessary.
  - Prioritize accessible tools for users on the ground within existing programs.
  - Coordinate adaptation, mitigation, and multi-hazard interactions to maximize the co-benefits of climate planning.

- **Be proactive.** Incentivize proactive planning for communities and encourage preparedness for rebuilding more resilient communities if disasters occur.

- **Develop lasting authority.** Create statutory authority for guidelines, approvals, and funding in place of executive action.
  - Emphasize resources for planning and implementation over research; for research, prioritize making downscaled projections nationally available and solutions-focused research.
  - Borrow from Obama-era executive orders, task forces, and councils to avoid re-inventing federal processes and include enforcement capacity.

- **Elevate social equity.** Avoid maladaptive planning that simply shifts existing vulnerabilities in time or place.
  - Engage front-line communities as partners.

- **Support nature-based solutions.** Redesign evaluation processes to fully consider blue/green infrastructure as an alternative to conventional infrastructure.

- **Facilitate local and regional action.** Use the federal government’s coordinating and convening capacity to support collaboration across sectors and levels of government.
  - Prioritize frameworks for federal guidance and community-based solutions.
  - Borrow from existing successful models of regional collaboration.
Question 1. What policies or programs should Congress strengthen or create to help communities adapt to changing climate conditions?

The information, data, tools, and expertise to support effective climate adaptation and build resilience remain challenging to access and utilize. While the federal government has played an important role in creating and making climate services available, they still fall short of the needs of local and regional decision-makers. To help communities understand and address climate change impacts at the local level, congressional action and the mobilization of federal technical support and funding is necessary. We recommend these resources focus on the following:

- **Prioritize access to information and technical expertise by providing:**
  - Locally relevant climate information, including down-scaled models, accessible to non-technical staff and guidance regarding best practices for adaptation.
  - Information on financing various adaptation actions.
  - Model policies and ordinances tailored to specific states.
  - Connections to adaptation practitioners who can provide much needed expertise.
  - Direct funding support for adaptation planning and implementation, potentially through a mechanism like the Federal Highway Trust Fund.

- **Support local and regional climate resilience activities:**
  - Strengthen and streamline federal agency capacity.
  - Mainstream climate risk assessment through a National Climate Adaptation and Resilience Policy Act modeled on or added to the existing NEPA framework to ensure that all federal programs account for climate change.
  - Organize existing federal programs under a shared federal authority to improve efficiency and consistency across agencies and to reduce cost.

- **Expand existing federal programs such as:**
  - NOAA Climate Program Office programs, including the Regional Integrated Sciences and Assessments (RISA) program and the Climate Resilience Toolkit.
  - USGS Climate Adaptation Science Centers.
  - US Department of Agriculture Climate Hubs, Regional Climate Centers, and the National Drought Information System.
  - Department of Defense Readiness and Environmental Protection Integration program.
  - Center for Disease Control and Prevention Building Resilience Against Climate Effects (BRACE) Program.
  - Bureau of Indian Affairs Tribal Resilience Program.

- **Revisit recent policy initiatives with potential to help communities adapt if better-funded and implemented, such as the:**
  - FEMA's National Mitigation Investment Strategy and research into the effects of climate migration from locations experiencing the greatest climate change impacts.
  - A Green New Deal should include efforts to adapt to climate change and incorporate local climate services to form part of a green jobs strategy.
Question 2. What adjustments to federal disaster policies should Congress consider to reduce the risks and costs of the extreme weather and other effects of climate change that can no longer be avoided?

The federal government has made some progress toward shifting away from reactive post-disaster recovery to a more proactive approach, for example, by assessing vulnerabilities at priority DOD installations. However, more aggressive and comprehensive progress is needed to successfully reduce the risks and costs of extreme weather and other climate impacts. This may be achieved with the following strategies:

- **Be proactive rather than reactive.** Refocus federal pre-disaster funding toward updating new and existing developments to higher standards and away from the renovation or replacement of repetitive loss properties. New standards should consider:
  - Current climate forecasting with broad scientific consensus.
  - Evidence-based future projections, downscaled to specific locations.
  - Multiple hazards modeled concurrently, including rapid-onset, slow-onset, and interactions between hazards (including potential for cascading system failures).
  - Mental and physical human health impacts.
  - Risk of the area, with low-risk areas having higher priority for rebuilding than high-risk ones. Avoid rebuilding critical public infrastructure, such as roads and bridges, in high risk areas.
  - Revised and improved buyout and acquisition programs for at-risk and repetitive loss residential properties by ensuring transparency to increase public acceptance, fairly compensating property owners, aggregating properties to create cohesive ecological conservation districts or publicly-accessible open spaces.

- **Work with, within and across existing agencies.** For example, FEMA and HUD are strategically positioned with existing statutory authority, regular funding, and the appropriate technical and staffing capacity to:
  - Manage complex programs and broaden mandates to prioritize adaptation
  - Refine existing programs (e.g. National Flood Insurance Program (NFIP))
  - Apply lessons from case studies and pilot programs to revise best practices towards proactive climate adaptation
  - Ensure that the most current climate change projections inform existing federally-funded plans such as Community Hazard Mitigation Plans, FEMA’s Hazard Mitigation Grant Program, and National Flood Insurance Rate maps (FIRM).

- **Leverage federal capacity for oversight, coordination, and robust funding across disciplines and platforms.**
  - Link key international and domestic partners in the commercial, nonprofit, institutional, and INGO sectors.
  - Catalyze existing progress already made at multiple levels of government to facilitate regional collaboration, coordination, and action.
  - Identify existing funding, partnership, and research models applicable to the U.S. domestic context.
Question 3. How should Congress update the laws governing management of federal lands, forests, and oceans to accelerate climate adaptation, reduce greenhouse gas emissions, and maximize carbon storage?

For lands, forests, and oceans to maintain critical ecological services, maximize carbon storage on a system-wide scale, and support adaptation, they must be fully cared for and managed. Congress should refer to scientific, system-based ecosystem service management that focuses on preservation, understanding the interactions of people and federal lands, and recognizing the contributions of, and risks to, indigenous communities. Stakeholders should be engaged as partners, as active collaboration among federal, tribal, state, regional, private, and non-profit organizations will contribute to long-term adaptive and integrated climate systems solutions.

- **Climate change is the lens.** View all laws that support federal land, forest, and ocean management from this perspective, and include both adaptation and mitigation needs.
  - Shift from a paradigm prioritizing resource use to management practices that focus on ecological health, adaptive capacity, and a healthy climate.

- **Prioritize preservation over restoration** while working to reduce and minimize extraction on federal lands.
  - Untouched wilderness provides far greater climate benefits than restoring degraded forests or healing damaged lands and oceans. Restoration can take decades to sequester the carbon lost through rapid deforestation.
  - Smart management and use of federal lands must emphasize and provide for the restoration and regeneration of natural systems that have been negatively impacted by past management and resource extraction practices.

- **Understand socio-ecological interactions better.**
  - Enhance and/or enact laws that have much stricter and broader enforcement of protections where federally managed lands, forests, and oceans interface with human development (i.e. wildland-urban interface).
  - Consider interactions between potential hazards, including impacts from outdated infrastructure design, planning, and management (i.e. impacts from electric utilities responding to wildfire conditions).

- **Recognize the contributions of – and threats to – indigenous and native peoples who:**
  - Are often at the frontlines of a changing climate, yet contribute the least to greenhouse gas emissions

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**Reforming the Robert T. Stafford Disaster Relief and Emergency Assistance Act**

The [Robert T. Stafford Disaster Relief and Emergency Assistance Act](https://www.adaptationprofessionals.org) (Stafford Act) mandates “replacement-in-kind” which keeps communities from rebuilding after disaster to be more resilient and prepared for the disaster. In 2012, the Federal Emergency Management Association (FEMA) announced a policy that allows communities to consider sea level rise when rebuilding, but the Stafford Act must be changed to allow FEMA to upgrade infrastructure and housing to climate-adapted standards after a disaster. Rather than allowing communities to consider sea level rise, Congress should mandate adaptation planning as part of Stafford-allocated funds, including securing additional funding specifically for infrastructure and structural relocation out of flood zones. Congress should thus implement recommendations following the National Resource Defense Council’s report “Going Under: Long Wait Times for Post-Flood Buyouts Leave Homeowners Underwater” which was requested by [H.R.5846 - Promoting Flood Risk Mitigation Act](https://www.adaptationprofessionals.org)
o Already face economic and political marginalization, human rights violations, loss of land and resources, etc.

o Have critical knowledge and agency to help enhance the resilience and management of the many ecosystems within their lands and territories and beyond.

Question 4. How can Congress better identify and reduce climate risks for front-line communities, including ensuring that low and moderate-income populations and communities that suffer from racial discrimination can effectively grapple with climate change?

Front-line communities have historically faced disproportionate hazards and risks, with federal programs often directly contributing to these conditions. Adaptation policy should address both the larger structural dynamics of inequity and marginalization as well as the gaps in financial well-being and success at the individual level. Legislation tailored to front-line and marginalized communities should strategically leverage federal resources to enhance existing funding, identify new funding streams, reform policies, and prioritize direct engagement.

- **Work with existing agencies and programs through an environmental justice lens**
  - Leverage agencies with the existing statutory authority, skill, and staff capacity to meet the needs of front-line and marginalized communities (i.e. FEMA, HUD, USDA, BIA).
  - Incorporate environmental justice considerations and equity filters into all climate programs, assessments, and procurements.
  - Mitigate risk transfers to frontline and marginalized communities in federal programs and through regulating financial and insurance industries.
  - Fund support for climate refugees, including renters, to find new jobs and housing and settle in their new locations; track and reduce exposure and social vulnerability for relocated people.
  - Enable development of national strategies and programs to manage extreme heat risks at the local level, especially in urban areas.

- **Actively engage front-line and marginalized communities in planning and implementation:**
  - Require federal RFPs to actively engage communities in research, planning, decision-making, and implementation to co-produce adaptation solutions.
  - Ensure federal hiring practices build local capacity and leadership opportunities for climate adaptation in front-line and marginalized communities.
  - Streamline paperwork and reporting demands in federal grant programs and proposals burdening front-line and marginal communities.

<table>
<thead>
<tr>
<th>Opportunities for Agency Action</th>
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<td>Specific agencies involved with frontline communities could offer the following support:</td>
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<td>- Department of Labor for jobs and human capital investment;</td>
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<td>- EPA for technical assistance, e.g. inventorying and guiding green infrastructure establishment;</td>
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<td>- FEMA for risk identification, mitigation, and reduction;</td>
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<td>- HUD for affordable resilient housing that avoids locations exposed to climate change;</td>
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<td>- NOAA, NIST, and USGS for data, forecasts, and capacity building (e.g. <a href="https://nist.gov">NIST Community Resilience Planning Guide</a>);</td>
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<td>- USDA shaping how aid in the Farm Bill is allocated.</td>
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Work directly with states, state agencies, and local governments to identify and directly support frontline and marginalized communities.

Incorporate climate adaptation and resilience into Green New Deal policies, including job creation, retention, and transition to a green economy.

- **Prioritize and innovate public and private funding for the most vulnerable.**
  - Direct allocations to the highest-risk communities unable to adapt without government support.
  - Use existing vehicles such as federal loans and grants, state and local taxes and fees, private sector investments, and philanthropic grants.
  - Pioneer innovative funding mechanisms such as resilient low-income affordable housing, rapid post disaster emergency financial restructuring, real estate contracts, and tax laws that capture the value of adaptive interventions including nature-based solutions.

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**Reforming the National Flood Insurance Program**

The National Flood Insurance Program (NFIP), created in 1968, funded by the Stafford Act and reauthorized by Congress every 5 years, provides insurance at rates otherwise unavailable to owners of at-risk properties. It is well positioned to have broad impacts on climate resilience. However, it also incentivizes replacement and rebuilding in flood-prone areas and insufficiently accounts for future climate conditions, creating a moral hazard. The NFIP could be reformed to proactively incorporate climate adaptation:

- Reflect climate projections in Flood Insurance Rate Maps (FIRMs). Support Risk Rating 2.0 reforms.
- Avoid construction in high-risk areas altogether.
- Build on the Community Rating System’s (CRS) potential for pre-disaster focus and fostering the adaptive capacity of neighborhoods.
- Pair with property acquisition programs (i.e. FEMA) to aggregate properties for transition into cohesive ecological conservation districts or publicly accessible open spaces.
- Explore incentives for other climate adaptation techniques such as managed relocation, transfer of development rights, and nature-based solutions / blue-green infrastructure.

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**Question 5. What policies should Congress adopt to help farmers, ranchers, and natural resource managers adapt to the impacts of climate change?**

Farmers, ranchers, and natural resource managers are already feeling the direct and indirect impacts of climate change. Congressional action should support these stakeholders by providing better access to information and tools, helping to close information gaps, and by providing education and technical assistance and additional funding. Specifically:

- **Provide information and tools.** Focus applied research to expand the base of actionable, science-based information on climate change adaptation. Programs should identify and target key knowledge gaps through collaborative research approaches that engage stakeholders and practitioners in the co-production and dissemination of knowledge. Increase funding for existing programs such as:
● NOAA’s Regional Integrated Sciences and Assessments (RISA) program, Regional Climate Centers (RCCs) and National Estuarine Research Reserves (NERRS) program
● USGS Climate Adaptation Science Centers (CASC)
● USDA Climate Hubs
● FWS’s Landscape Conservation Cooperatives Network (LCC)

**Make tools accessible, easier to find, understand, and use.**
- Prioritize development and deployment of locally relevant climate information including historic information and downscaled climate information.
- Support the development of open data tools or technologies to improve access to real-time climate forecasting including existing knowledge dissemination tools such as the U.S. Climate Resilience Toolkit, National Integrated Drought Information System (NIDIS), and Climate.gov.

**Enhance educational and technical assistance programs to help stakeholders apply existing knowledge.**
- Increase support for existing institutions such as land grant colleges and agricultural extension services to deliver climate adaptation programs.
- Target capacity gaps in adaptive strategies such as crop diversification, no-till agriculture, soil conservation, energy-efficient irrigation, multistrata agroforestry, tree intercropping, regenerative agriculture, closed loop agriculture, natural fire risk reduction techniques, economic diversification, accessing local markets, and emission reduction techniques.
- Adopt policies that facilitate cooperation across political boundaries to effectively manage natural resources.
- Prioritize long-term interventions such as farmland restoration that support the transition to low-emission and resilient practices.

**Integrate climate science into federal policies and budget planning**
- Leverage federal investments, guide decision-making, discourage maladaptation, and incentivize climate action and environmental stewardship.
- Maintain existing protections for natural resources.
- Integrate climate impact assessments and cost-benefit analyses into agricultural subsidies and federal budget directives.
- Consider climate projections and risks when reviewing current and future programs and grants.

**Question 6. What policies should Congress adopt to maintain and expand monitoring, research, and assessment efforts in order to support solutions to the climate crisis and provide decision-makers – and the American people – with the information they need? Please speak to the scale of investment needed to achieve results.**

Increasing support for climate monitoring, research, and assessment is critical for informed decision-making. Federal programs are crucial for providing fundamental science and data which in turn supports private sector and university-based climate services for communities, organizations, and individuals. The current climate services economy is limited by confusion over appropriate methods and inequitable access, especially for front-line communities and Tribes (Question 4 for more discussion of front-line communities).
• **Monitoring and reporting** provide a critical feedback loop for researchers and practitioners on the effectiveness and progress of various interventions.
  - Implement standardized reporting on greenhouse gas emissions, climate risk, and mitigation and adaptation actions by state and local governments, federal agencies, and non-governmental actors.
  - Support the creation of an integrated reporting system that will advance efforts to track progress toward climate goals and identify best practices.
  - Build on existing tools and standards such as those used by the FEMA Community Rating System, the Global Covenant of Mayors for Climate and Energy, and CDP.
  - Develop national-level indicators for adaptation, building on research and indicator development efforts emerging from the bottom-up

• **Research:**
  - Increase funding and support for current federal research programs, related institutes, and university-based research such as:
    - NOAA program including Regional Integrated Sciences and Assessments (RISA) program, the Climate Resilience Toolkit, Regional Climate Centers, National Drought Information System, and National Estuarine Research Reserves (NERRS) program
    - USGS Climate Adaptation Science Centers
    - U.S. Department of Agriculture Climate Hubs
  - Include regional and thematic specialists on staff to achieve results.
  - Emphasize interagency coordination to help improve efficiency and reduce the burden on local actors working with multiple agencies.

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**Moving from Assessment to Practice**

Monitoring, research, and assessment programs can leverage public involvement and “citizen science” to advance and apply the work done through federal agencies such as the National Climate Assessment.

A civil-society-based *Science for Climate Action Network* (SCAN) has been established to develop and implement this new approach, as described in several reports published [here](#) and [here](#). Initial annual appropriations of $2 Million per year will be used to establish the network and will need to grow to $10 Million per year once network nodes are established in universities and other organizations.

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• **Assessment:**
  - Expand the US National Climate Assessment (NCA) beyond a focus on assessing vulnerability to establish best practices for evidence-based adaptation and mitigation.
  - Make NCA information more widely available in easy to use formats to help consumers of climate services make informed choices.
  - Ensure that NCA information is accountable and accessible to front-line communities.