Disclaimer: To the extent this document mentions or discusses statutory or regulatory authority, it does so for informational purposes only. This document does not substitute for those statutes or regulations, and readers should consult the statutes or regulations to learn what they require. Neither this document, nor any part of it, is itself a rule or a regulation. Thus, it cannot change or impose legally binding requirements on EPA, States, the public, or the regulated community. Further, any expressed intention, suggestion or recommendation does not impose any legally binding requirements on EPA, States, tribes, the public, or the regulated community. Agency decision makers remain free to exercise their discretion in choosing to implement the actions described in this Plan. Such implementation is contingent upon availability of resources and is subject to change.

EPA Publication Number 100B22001
Preface

Climate change is threatening communities across the nation. Millions of Americans feel the destructive effects of climate change each year when the power goes down, rivers and lakes go dry, homes are destroyed by wildfires and communities are flooded by hurricanes. Underserved communities are especially vulnerable to the climate crisis and are more likely to experience the negative health and environmental effects of extreme weather events.

The Biden-Harris Administration is actively confronting the climate crisis while also advancing environmental justice. As part of a whole-of-government approach, the U.S. Environmental Protection Agency is strongly committed to taking the actions necessary to protect human health and the environment and to increase the resilience of the entire nation, even as the climate changes.

The EPA’s commitment to action is reflected in its FY 2022-2024 Strategic Plan and in the 2021 Climate Adaptation Action Plan. Both documents present priority actions the agency will take to ensure that its programs, policies and operations remain effective under future climate conditions while we work to support states, territories, tribes and communities in increasing their own adaptive capacity and resilience to climate change impacts.

From flooding at Superfund sites, to wildfires causing air pollution, to sea-level rise affecting water quality and infrastructure, the EPA will boldly address climate impacts in both its programs and the communities it serves. We recognize the importance of tribal, state and local government partnerships in efficient, effective and equitable implementation of climate change adaptation strategies. Our plans were informed and improved by input we received in listening sessions we held to engage these and other partners as we developed these plans.

To ensure we are addressing the climate crisis in a comprehensive way, each of our national program and regional offices has developed individual Climate Adaptation Implementation Plans that outline how the EPA will attain the agencywide goals described in the broader Climate Adaptation Action Plan. These plans describe how programs and regions will integrate climate adaptation into their programs, partnerships and operations. They also describe how they will help partners build their
resilience and capacity to adapt, while delivering co-benefits, including curbing greenhouse-gas emissions and other pollution, and promoting public health, economic growth and climate justice. Of course, the EPA has a major role to play on emissions reductions as well, though that is not the focus of these plans. Indeed, we must focus on both climate adaptation and mitigation to ensure our nation and communities thrive in an era of climate change.

As part of this effort, we will empower our staff and partners by increasing awareness of how climate change may affect our collective ability to implement effective and resilient programs. We will also provide them with the necessary training, tools, data, information and technical support to make informed decisions and integrate climate adaptation into our work.

The EPA will work to modernize its financial assistance programs to encourage climate-resilient investments across the nation. We will also focus on ensuring that investments funded by the Bipartisan Infrastructure Law, the Inflation Reduction Act and other government programs are resilient to the impacts of climate change. Finally, as our knowledge advances and as impacts continue to develop, our response will likewise evolve. We will work to share these developments to enhance the collective resilience of our nation.

The actions outlined in these implementation plans reflect the EPA's commitment to build every community's capacity to anticipate, prepare for, adapt to and recover from the increasingly destructive impacts of climate change. Together with our partners, we will work to create a healthy and prosperous nation that is resilient to the ever-increasing impacts of climate change — which is vital to the EPA's goal of protecting human health and the environment and to ensuring the long-term success of our nation.

Janet G. McCabe
The National Intelligence Council recently reported that climate change will increasingly exacerbate risks to the U.S. national security interests as physical impacts from climate change increase and geopolitical tensions rise as a result. As the EPA’s lead for the domestic homeland security components of national security, the Office of Homeland Security (OHS) has written this Climate Change Adaptation Implementation Plan to explain how climate change impacts OHS’ role and the priorities OHS has to adapt to these changes.

OHS is likely to be impacted by climate change in a variety of ways.

- The National Security Council (NSC) coordinates the White House policy development process for a wide array of topics including critical infrastructure security and resilience, biodefense and public health, cybersecurity, as well as all-hazards emergency response, recovery, and disaster mitigation. As the EPA lead representative to the NSC, OHS will be asked to participate in an increasing number of interagency national security policy development processes involving climate change and climate security. OHS will also continue its coordination role with the Intelligence Community to assist with their assessments of the impacts of climate change on national security.

- OHS will need to engage Regional Recovery Coordinators and National Programs in an increasing number and severity of disaster recovery operations. This would also include enhancing OHS’s role of representing EPA on the Recovery Support Function Leadership Group which coordinates Federal interagency readiness and support for disaster recovery operations.

- OHS will engage Regional Disaster Mitigation Coordinators in an increasing number of projects initiated by State, Local, Tribal and Territorial (SLTT) governments to reduce the risks posed by natural disasters. As Federal agencies receive more and more resources to assist SLTTs with disaster mitigation, OHS will use its role as EPA’s representative to the Mitigation Framework Leadership Group to promote the use of environmental protection, environmental justice, green infrastructure, natural systems, ecosystem processes, green energy, nature-based solutions, etc. in disaster mitigation.

As the Senior Career Leader responsible for overseeing climate adaptation activities in OHS, I am committing this office to enhancing EPA’s adaptation to the climate change crisis.

Ted J. Stanich,
Associate Administrator
& Federal Senior Intelligence Coordinator
Office of Homeland Security
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SECTION 1: INTRODUCTION

The Office of Homeland Security (OHS), housed within the Office of the Administrator, serves as the lead for national and homeland security at the EPA. The OHS Associate Administrator serves as the National Security Advisor and the Federal Senior Intelligence Advisor to the Administrator and the Deputy Administrator. OHS’s mission is to empower and strengthen EPA Programs and Regions by informing national security decisions and policy-making efforts, countering threats to Agency equities and interests, expanding Agency resources through effective partnerships, and providing a national capability to coordinate and integrate homeland security resources.

Climate disasters are predicted to get more intense and occur more often. Climate change may also cause both domestic and international impacts. To support EPA’s homeland security mission of emergency response during natural disasters and human-made events, OHS provides national strategic coordination of the Agency’s activities and coordinates Agency-wide discussions regarding disaster mitigation and recovery policy and guidance.

States, local communities, tribes and territories (SLTTs) across the nation are recovering from a historic number of natural disasters. Wildfires, droughts, floods and other natural disasters are likely to be exacerbated by climate change. EPA, particularly EPA Regional experts, has an opportunity to work with these SLTTs as they plan recovery efforts to incorporate the adaptation to future conditions. These adaptation investments can also include environmental protection efforts, such as advancing environmental justice, improving stormwater management, nature-based/green infrastructures, estuary restoration and others.

Communities across the nation are taking measures to increase resilience from climate change, either in preparation for future disasters or in the recovery process of disasters that have occurred. FEMA, HUD, Army Corps of Engineers and other Federal agencies have a substantial amount of financial assistance available to assist these communities to become more resilient. In addition, Federal agencies are also developing tools to assist communities in assessing future climate conditions for their locality. By working with these agencies, and working with the communities themselves, EPA has an opportunity to incorporate environmental protection measures into these resilience projects but needs staffing resources at the regional level to do so.

1.1 National Security Policy Coordination

OHS represents EPA at the White House National Security Council (NSC), the White House Office of Science Technology and Policy (OSTP), and other Departments and Agencies on national and homeland security policies. It coordinates the development of national security policy, ensuring EPA equities are properly represented. OHS, along with EPA’s Office of Water, also collaborates with the Department of
Homeland Security’s Cybersecurity and Infrastructure Security Agency (DHS/CISA) and other Sector Risk Management Agency (SRMA) partners to share intelligence and threat information to protect the Nation's critical infrastructure from all hazards and emerging threats.

OHS coordinates disaster mitigation and recovery activities across Agency programs and regions, represents the Agency at federal disaster mitigation and recovery planning groups, and coordinates with FEMA and other federal agencies on specific disaster mitigation and recovery efforts. EPA regions will lead EPA recovery support to SLTTs within their region. All divisions in the region may need to engage in mitigation and recovery, as appropriate. OHS and national programs are expected to provide support and resources to regions on mitigation and recovery activities, as appropriate. Regional Mitigation Coordinators and Regional Recovery Coordinators will represent the region in interactions with OHS and other national programs as part of mitigation and recovery activities.

1.2 National Planning Framework Coordination (Prevention, Protection, Mitigation, Response, & Disaster Recovery)

EPA supports other federal agencies and SLTTs throughout all stages of a disaster (response, mitigation, and recovery) as laid out in the National Response Framework (NRF), National Mitigation Framework (NMF), and National Disaster Recovery Framework (NDRF). OHS communicates across the Agency to coordinate mitigation and recovery activities across Agency Programs and Regions, including representation of the Agency at federal mitigation and recovery planning groups, and coordination with FEMA and other federal agencies on specific disaster mitigation and recovery efforts. OHS collaborates with SRMA partners to protect the Nation's critical infrastructure from all hazards and emerging threats through enhancement of the preparedness, mitigation, resilience, and response activities of the sector. OHS works with EPA colleagues to support Agency priorities and enhance decision-making.

EPA Order 2074, U.S. EPA National Approval to Disaster Mitigation and Recovery, provides a mechanism for leveraging Agency programs and resources in support of disaster mitigation and recovery activities and to provide a structure for how regional offices and national programs will coordinate to support states, tribes, territories, and local communities preparing for or recovering from disasters.

Disaster recovery involves the use of federal resources to support state, tribal, territorial, and locally led efforts to rebuild communities for long-term success and resilience. With the right planning and community engagement, new mitigation and recovery investments have the potential not only to strengthen resilience to disasters, but also to protect human health and the environment. For both mitigation and recovery, EPA coordinates with other federal, state, tribal, territorial, and non-governmental partners to maximize investments; provides critical expertise for building resilience to disasters; and provides support through financial and technical assistance programs, guidance, and tools.

1.3 Intelligence and Analysis

OHS represents EPA on several inter-agency committees coordinating national security and intelligence, including climate security.
• **ODNI National Intelligence Estimate on Climate Change.** The Office of the Director of National Intelligence (ODNI) oversaw the development of the first-ever National Intelligence Estimate (NIE) on Climate Change. The NIE is the most authoritative assessment from the Intelligence Community (IC) and represents the consensus view of all IC elements. The U.S. Federal Science Agencies provided the baseline observational data and climate modeling that enabled the IC to conduct the geopolitical analysis of the implications and risks to the United States.

• **The Climate Security Advisory Council (CSAC) is a joint partnership between the U.S. Intelligence Community and the Federal Science Community to better understand and anticipate the ways climate change affects U.S. national security interests.**

• The **Climate Security Roundtable** convenes experts from academia, the private sector, and civil society to provide support to the CSAC.

• **The IC Environmental Security Working Group (ICESWG) is a grassroots organization and network operating under the sponsorship of the U.S. Civil Applications Committee, National Intelligence University, and National Intelligence Council Strategic Futures Group that promotes the provision, collaboration and coordination of environmental security-related intelligence and information between the intelligence, government and academic communities.**

OHS provides intelligence and security information in support of EPA policy, operational decisions and assessing, anticipating, and warning of potential security threats to the Agency and our national security. OHS serves as the Federal Intelligence Coordinating Office (FICO) with the Office of the Director National Intelligence (ODNI) and is the primary liaison to the intelligence community. OHS provides classified information management, safeguarding and sharing of classified information, and cyber threat intelligence. OHS also conducts activities to identify, deter, and protect EPA personnel, information technology, and critical assets from counterintelligence concerns and insider threats.
SECTION 2: KEY DEFINITIONS

For use in this document, the following terms are defined as follows:

**Disaster recovery** refers to those capabilities necessary to assist communities affected by an incident to recover effectively, including, but not limited to, rebuilding infrastructure systems; providing adequate interim and long-term housing for survivors; restoring health, social, and community services; promoting economic development; and restoring natural and cultural resources. (See Presidential Policy Directive Number 8, National Preparedness, March 30, 2011.)

**Mitigation** refers to those capabilities necessary to reduce loss of life and property by lessening the impact of disasters. Mitigation capabilities include, but are not limited to, community-wide risk reduction projects; efforts to improve the resilience of critical infrastructure and key resource lifelines; risk reduction for specific vulnerabilities from natural hazards or acts of terrorism; and initiatives to reduce future risks after a disaster has occurred. (See Presidential Policy Directive Number 8, National Preparedness, March 30, 2011.) Climate adaptation addresses a subset of these hazards that are known to be caused by climate change.

In this document, for brevity, OHS refers to “disaster mitigation.” However, for clarity, it is best to refer to this as “natural disaster mitigation” to distinguish these actions from climate change mitigation (Climate change mitigation refers to actions limiting the magnitude and rate of future climate change by reducing greenhouse gas emissions.), community mitigation (which refers to public health actions used to reduce the spread of diseases), and resilience (which includes natural disaster mitigation but involves a much broader set of threats and hazards beyond natural disasters, such as terrorism and cyber-attacks).

Natural disaster mitigation is associated with, but not the same as, other actions, such as:

- Community resilience, which is the sustained ability of a community to use available resources (energy, communication, transportation, food, etc.) to respond to, withstand, and recover from adverse situations.
- Climate change adaptation or climate adaptation means taking action to prepare for and adjust to both the current and projected impacts of climate change.
- Sustainability, which involves creating and maintaining the conditions under which humans and nature can exist in productive harmony to support present and future generations.
SECTION 3: VULNERABILITIES

Climate change is likely to impact OHS programs primarily in two ways: 1) the increase in the number and severity of disasters is likely to increase the urgency and scope of NSC actions necessary to combat these impacts, and 2) as the IC assesses the impacts of climate change, OHS will coordinate with an increasing number of organizations to address the domestic vulnerabilities and impacts of these changes.

As the EPA coordinator of national security policy, including domestic incident mitigation, response and recovery, OHS will be asked to be involved in an increasing number of national security policy development processes. The policy development is likely to include natural disaster mitigation to increase community resilience to natural disasters, defend the nation against actors who will want to exploit climate change impacts, and assist other national security policy makers on the impacts of climate change.

The National Intelligence Council recently completed the *Estimate Climate Change and International Responses Increasing Challenges to US National Security Through 2040* (National Intelligence Council, NIE-2021-10030-A). The following are its key findings:

- **Key Judgment 1:** Geopolitical tensions are likely to grow as countries increasingly argue about how to accelerate the reductions in net greenhouse gas emissions that will be needed to meet the Paris Agreement goals.
- **Key Judgment 2:** The increasing physical effects of climate change are likely to exacerbate cross-border geopolitical flashpoints as states take steps to secure their interests.
- **Key Judgment 3:** Scientific forecasts indicate that intensifying physical effects of climate change out to 2040 and beyond will be most acutely felt in developing countries, which we assess are also the least able to adapt to such changes.

Because of the increasing activities in these vulnerability assessment and policy-making activities, OHS will need to adapt to the increasing tasks associated with climate security, disaster mitigation and recovery. Such adaptations including identifying EPA’s role in climate security, supporting EPA regions in their efforts in disaster mitigation/recovery, and working with other Federal agencies to include environmental protection actions (such as advancing environmental justice and nature-based solutions) into Federal disaster programs.

FINANCIAL IMPACT OF NATURAL DISASTERS

The costs associated with the response, recovery and mitigation of natural disasters is significant.

Since 2017, the United States has experienced:

- Over 340 Major Disasters
- Over $180 billion has been allocated for disaster recovery
- Over $30 billion has allocated for disaster mitigation

Infrastructure Investment and Jobs Act invests over $50 billion to protect against droughts, heat, floods and wildfires, in addition to a major investment in weatherization.
SECTION 4: PRIORITY ACTIONS

**Priority Action Statement**
The following priorities will be led by the OHS in conjunction with National Program Offices, EPA regional offices and other Federal agencies. They are meant to advance EPA’s role in national security and assist EPA regional offices by building capacity to support local-level community resilience.

### 4.1 OHS Priority Action 1

<table>
<thead>
<tr>
<th>Title</th>
<th>Ensure EPA has adequate representation and involvement in the planning for and execution of National Level Exercise 2024.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>The National Level Exercise (NLE) program is a statutorily mandated exercise program led by FEMA and includes all levels of government. FEMA has stated that NLE 2024 will focus on natural disaster mitigation, including climate change adaptation. This exercise development is being coordinated through FEMA’s National Exercise Program and the Mitigation Federal Leaders Group. To plan for the exercises, FEMA is hosting 10 regional seminars focusing on disaster mitigation. EPA is being asked to support these seminars, either at the regional level or at the national-level.</td>
</tr>
<tr>
<td><strong>Lead</strong></td>
<td>The Office of Emergency Management (OEM) coordinates EPA’s participation in National Level Exercises. OHS will coordinate with the Office of Policy, OEM and EPA Regional Offices to ensure EPA representation.</td>
</tr>
<tr>
<td><strong>Timeframe</strong></td>
<td>The seminars have already begun in preparation for an exercise in 2024.</td>
</tr>
<tr>
<td><strong>Performance Metrics</strong></td>
<td>FY 2022, EPA represented in 2 resilience seminars</td>
</tr>
<tr>
<td></td>
<td>FY 2023, EPA represented in 3 resilience seminars</td>
</tr>
<tr>
<td></td>
<td>FY 2024, EPA participates in one National Level Exercise</td>
</tr>
</tbody>
</table>

### 4.2 OHS Priority Action 2

<table>
<thead>
<tr>
<th>Title</th>
<th>Identifying EPA’s Role in Climate Security.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>As the Intelligence Community assesses the impacts of climate change, OHS will coordinate with a variety of organizations to consider the domestic vulnerabilities and impacts of these changes. Internally, OHS will work with the Office of Air and Radiation, the Office of Research and Development, the Office of International and Tribal Activities, and other offices as appropriate, to establish a common understanding of EPA’s role in climate security.</td>
</tr>
<tr>
<td><strong>Lead</strong></td>
<td>OHS will facilitate meetings with OAR, ORD and OITA to identify EPA’s role.</td>
</tr>
<tr>
<td><strong>Timeframe</strong></td>
<td>Meetings for this action have commenced with completion by end of 2022.</td>
</tr>
<tr>
<td><strong>Performance Metrics</strong></td>
<td>For FY 2022, OHS will host 3 internal EPA meetings to facilitate a common understanding of EPA’s role in climate security.</td>
</tr>
<tr>
<td></td>
<td>For FY 2023, OHS will host one internal EPA meeting to review EPA’s role in climate security.</td>
</tr>
<tr>
<td></td>
<td>For FY 2024, OHS will host one internal EPA meeting to review EPA’s role in climate security.</td>
</tr>
</tbody>
</table>
4.3 OHS Priority Action 3

**Title**
Working with other Federal agencies to include equity and nature-based solutions in their disaster mitigation and recovery efforts.

**Description**
OHS represents EPA on the Recovery Support Function Leadership Group (RSFLG) and Mitigation Framework Leaders Group (MitFLG). As OHS coordinates with these Federal interagency groups, it will promote environmental protection efforts, such as advancing environmental justice, improving stormwater management, nature-based/green infrastructures, estuary restoration and others. In particular, the RSFLG is currently re-writing the NDRF, which guides Federal disaster recovery management. OHS will ensure these revisions include necessary language to promote equity and climate change adaptation/climate resilience/adaptation to future conditions.

**Lead**
OHS will represent EPA on the group re-writing the NDRF. OHS will consult, as necessary, EPA regional recovery coordinators and National Program contacts.

**Timeframe**
Re-writing the NDRF has commenced. A new NDRF to be in draft by November 2022.

**Performance Metrics**
For 2022, OHS will take part in 10 RSFLG and MitFLG meetings
For 2023, OHS will take part in 10 RSFLG and MitFLG meetings
For 2024, OHS will take part in 10 RSFLG and MitFLG meetings

4.4 OHS Priority Action 4

**Title**
Ensure EPA executives understand EPA’s role in disaster mitigation and recovery, including how this role supports climate adaptation.

**Description**
In November of 2020, EPA issued Order 2074 to reaffirm EPA’s role in leveraging Agency programs and resources in support of disaster mitigation and recovery activities and to provide a structure for how regional offices and national programs will coordinate to support states, tribes, territories, and local communities preparing for or recovering from disasters. To enhance the understanding of this Order, OHS will distribute fact sheets to senior regional executives on EPA’s role in disaster mitigation and recovery.

**Lead**
OHS with support from AO Lead Region (Region 10)

**Timeframe**
Drafts of documents have already been written. Completion of documents and distribution to EPA regions by the end of 2022.

**Performance Metrics**
For FY 2022, distribute 2 factsheets on disaster mitigation and recovery to Deputy Regional Administrators (DRA).
For FY 2023, take part in one DRA meeting to discuss EPA’s role in disaster mitigation and recovery.
For FY 2024, track the number of EPA Disaster Mitigation and Recovery Coordinators who brief their Division Director and/or DRA on EPA’s role in disaster mitigation and recovery (no measure to be set).
## 4.5 OHS Priority Action 5

<table>
<thead>
<tr>
<th><strong>Title</strong></th>
<th>Provide assistance to regions to enhance disaster mitigation and recovery, including how disaster mitigation and recovery can support the Agency’s climate adaptation goals.</th>
</tr>
</thead>
</table>
| **Description** | EPA’s involvement in community-specific disaster mitigation and recovery efforts is generally led by the applicable EPA regional office. To facilitate this activity, Order 2074 established Regional Recovery and Disaster Mitigation Coordinators. OHS will work with these coordinators to enhance regional involvement in recovery and disaster mitigation efforts in the following ways:  
- Work with AO Lead Region Coordinator to host monthly recovery and disaster mitigation conference calls.  
- Review training materials for regional personnel, including the need for additional training material.  
- Facilitate reporting of performance measures established under the EPA Strategic Plan.  
- Identify recent Presidentially Declared Disasters in region.  
- Advance environmental justice and nature-based solutions. |
| **Lead** | OHS with Regional Recovery and Disaster Mitigation Coordinators as well as National Program Offices. |
| **Timeframe** | Ongoing |
| **Performance Metrics** | For FY 2022, host 10 meetings to enhance the capabilities of EPA’s Disaster Mitigation and Recovery Regional Coordinators.  
For FY 2022, track the estimated number of hours EPA Regions spend on disaster recovery activities.  
For FY 2023, host 10 meetings to enhance the capabilities of EPA’s Disaster Mitigation and Recovery Regional Coordinators.  
For FY 2023, track the estimated number of hours EPA Regions spend on disaster recovery activities.  
For FY 2024, host 10 meetings to enhance the capabilities of EPA’s Disaster Mitigation and Recovery Regional Coordinators.  
For FY 2024, track the estimated number of hours EPA Regions spend on disaster recovery activities. |
SECTION 5: PRIORITY ACTION LINKAGE TO STRATEGIC PLAN

The priorities of this plan support Objectives 1.2 and 6.3 of the agency’s Strategic Plan.

**Objective 1.2:** Accelerate Resilience and Adaptation to Climate Change Impacts—Deliver targeted assistance to increase the resilience of Tribes, states, territories, and communities to the impacts of climate change.

**Objective 6.3:** Prepare for and Respond to Environmental Emergencies Prevent, prepare, and respond to environmental emergencies and support other agencies on nationally significant incidents, working with Tribes, states, and local planning and response organizations

Specifically, this plan support three annual measures within the Strategic Plan.

- Number of federally recognized Tribes assisted by EPA to take action to anticipate, prepare for, adapt to, or recover from the impacts of climate change.
- Number of states, territories, local governments, and communities, especially communities which are underserved and disproportionately at risk from climate change, assisted by EPA to take action to anticipate, prepare for, adapt to, or recover from the impacts of climate change.
- Hours of appropriate subject-matter experts provided by EPA to help communities adapt to climate impacts, build long-term resilience, and support the most underserved and vulnerable communities after federally declared disasters.
SECTION 6: TRAINING FOR ENHANCING STAFF KNOWLEDGE ABOUT CLIMATE ADAPTATION

When EPA engages in inter-agency disaster mitigation and recovery operations, it is an opportunity to work directly with Federal and SLTT partners, at the local level, to enhance climate adaptation. In October 2021, OHS conducted a training for Regional Disaster Mitigation and Recovery Coordinators. The purpose of the training was to achieve a common understanding of inter-agency disaster mitigation and recovery operations among the coordinators, and to have presentation materials for the coordinators to use within their regions to train other staff.

The materials were completed, and the training was saved for future use. OHS will review the materials and make any necessary changes annually beginning in October 2022.

Additional training will be provided based on requests from Regional Disaster Mitigation and Recovery Coordinators. Potential topics for additional training include the following:

- Methods for conducting Benefits-Costs Analyses, including quantifying benefits of nature-based approaches to climate adaptation.
- Case studies on braiding funding streams from multiple Federal agencies.
- New tools to be used for disaster mitigation and recovery.
- Communication of risks of natural disasters and benefits of adaptation.

Additional training will be conducted on an as-needed basis, based on requests from EPA regions.
SECTION 7: IDENTIFICATION OF SCIENCE NEEDS

The United States will also move quickly to build resilience, both at home and abroad, against the impacts of climate change that are already manifest and will continue to intensify according to current trajectories. Regions will need community/locality-specific science to provide technical assistance on future conditions for localities recovering from disaster impacts and applying for disaster mitigation assistance.

The siting and design decisions of infrastructure is primarily made at the local level. Communities rebuilding after disasters may not have the technical capabilities to collect and analyze data to predict the impacts of climate change for their area. Communities will likely need data and communications tools to assess the costs, benefits and uncertainties associated with nature-based and other resilience measures. In addition, communities may need communication tools to explain future planning to non-technical audiences.

Several Federal agencies have developed tools to assist communities with climate adaptation planning. Communities may need technical assistance to determine what tools they need, based on their unique needs, and how to utilize multiple tools in their decision-making processes.
SECTION 8: BUDGETARY NEEDS

SLTTs across the nation are recovering from a historic number of natural disasters. Wildfires, droughts, floods and other natural disasters are likely to get worse because of climate change. There are approximately 60 disaster declarations each year. EPA has an opportunity to work with these SLTTs as they plan recovery efforts to incorporate the adaptation to future conditions to mitigate the impacts of disasters. These adaptation strategies can also include environmental protection efforts, such as advancing environmental justice, improving stormwater management, nature-based/green infrastructures, estuary restoration and others. As EPA implements the EPA Order 2074 U.S. EPA National Approach To Disaster Mitigation and Recovery, it is apparent that EPA regions are not able to be involved in most disaster recovery operations due to inadequate staffing and funding. Because of this, EPA misses an opportunity to support many of these impacted communities when they are most likely to take measures to adapt to climate change.

Every time a community is impacted by a natural disaster, it provides EPA with an opportunity to work directly with that community and associated state and other federal agencies to plan and improve its resilience to future disasters. It also provides an opportunity to improve environmental protection practices, nature-based mitigation projects, and improve equity in these areas. EPA national programs and regions do not have the resources to become involved in each of the declarations. Any increase in resources will support the ability to work directly with communities in recovery efforts.