



U.S. Department of Justice Climate Change Adaptation Plan

June, 2012

THIS PAGE INTENTIONALLY LEFT BLANK

CONTENTS

EXECUTIVE SUMMARY	III
1. POLICY FRAMEWORK FOR CLIMATE CHANGE ADAPTATION	1-1
2. AGENCY VULNERABILITY.....	2-1
3. PROCESS OF AGENCY ADAPTATION PLANNING AND EVALUATION.....	3-1
3.1 Vulnerability Analysis	3-1
3.2 Adaptation Plan.....	3-2
4. PROGRAMMATIC ACTIVITIES.....	4-1
5. ACTIONS TO UNDERSTAND CLIMATE CHANGE RISKS AND OPPORTUNITIES.....	5-1
5.1 Action 1U – Increase Adaptive Capacity of Buildings and Utilities Infrastructure.....	5-1
5.2 Action 2U – Increase the Adaptive Capacity of Personnel and Assets	5-1
5.3 Action 3U – Anticipate and Avoid Disruption to Operations.....	5-1
5.4 Action 4U – Anticipate and Avoid Diversion of Fiscal Resources	5-1
6. ACTIONS TO ADDRESS CLIMATE CHANGE RISKS AND OPPORTUNITIES.....	6-1
6.1 Action 1A – Increase Adaptive Capacity of Buildings and Utilities Infrastructure.....	6-1
6.2 Action 2A – Increase Adaptive Capacity of Personnel and Assets	6-1
6.3 Action 3A – Anticipate and Avoid Disruption to Operations.....	6-1
6.4 Action 4A – Anticipate and Avoid Diversion of Fiscal Resources	6-1

Comments may be submitted by email to Environmental.Program@usdoj.gov or by mail to the address below:

Department of Justice
Justice Management Division
Facilities and Administrative Services Staff
Environmental and Sustainability Services
145 N Street NE
2CON Building, Room 9E.300
Washington, DC 20530

ABBREVIATIONS, ACRONYMS, AND SYMBOLS

Adaptation Plan	DOJ Climate Change Adaptation Plan
ATF	Bureau of Alcohol, Tobacco, Firearms and Explosives
BOP	Bureau of Prisons
CDC	Centers for Disease Control
CEQ	Council on Environmental Quality
COOP	Continuity of operations
DEA	Drug Enforcement Administration
DHS	Department of Homeland Security
DoD	Department of Defense
DOE	Department of Energy
DOJ	Department of Justice
EO	Executive Order
EPA	Environmental Protection Agency
FBI	Federal Bureau of Investigation
FEMA	Federal Emergency Management Agency
GHG	Greenhouse gas
GSA	General Service Administration
HQ	Headquarters
IT	Information Technology
JMD	Justice Management Division
NOAA	National Oceanic and Atmospheric Administration
OSHA	Occupational Safety and Health Administration
SSPP	Strategic Sustainability Performance Plan
STP	Office of Science and Technology Policy
Task Force	Interagency Climate Change Adaptation Task Force
USMS	U.S. Marshals Service
Working Group	Interagency Climate Change Adaptation Working Group

EXECUTIVE SUMMARY

This document presents the Department of Justice (DOJ) Climate Change Adaptation Plan (also referred to as the “Adaptation Plan”), which will be submitted to the Council on Environmental Quality (CEQ) as part of the DOJ 2012 Strategic Sustainability Performance Plan (SSPP).

DOJ, along with other Federal Agencies, is required to comply with Executive Order (EO) 13514, “*Federal Leadership in Environmental, Energy, and Economic Performance*,” which was signed by President Obama on 5 October 2009 to establish an integrated strategy toward sustainability in the Federal government. In compliance with Section 8(i) of EO 13514, DOJ is implementing a policy framework for climate change adaptation, analyzing agency risks and vulnerabilities, and performing adaptation planning in accordance with the Implementing Instructions established by the Interagency Climate Change Adaptation Working Group.

In March 2012, DOJ finalized a high-level analysis of the agency’s vulnerability to climate change. The agency’s three highest-risk critical assets were found to be buildings, utilities (including telecommunications (data and voice), power, and water) infrastructure, and personnel. Across these three major asset categories, DOJ most frequently identified severe weather and flooding as the key climate stressors, followed by drought and temperature changes, and then sea level rise. Common climate change vulnerabilities fell into four broad categories: 1) physical damage to buildings and utilities infrastructure, 2) health impacts to personnel, 3) disruption of operations resulting from potential unrest among affected populations, and 4) diversion of fiscal resources away from routine maintenance to emergency management.

This Adaptation Plan presents DOJ’s climate change policy framework, summarizes the results of the agency’s high-level vulnerability analysis, describes the overall process envisioned for adaptation planning and evaluation, and proposes climate change programmatic activities. The Adaptation Plan concludes with a detailed discussion of the actions the agency intends to pursue to both *better understand* and *address* climate change risks and opportunities in FY 2013 and beyond. These actions are closely aligned with the four broad categories of climate change vulnerability previously identified by DOJ.

The Justice Management Division (JMD) of DOJ has taken the lead in coordinating climate change adaptation planning for the agency. In this role, representatives from JMD have worked closely with the five major DOJ Bureaus: Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF); Federal Bureau of Investigation (FBI); Drug Enforcement Administration (DEA); Bureau of Prisons (BOP); and U.S. Marshals Service (USMS). JMD will continue to work with the Bureaus, as well as with key Federal, state, and regional agencies to implement and evaluate the Adaptation Plan. Furthermore, JMD will lead the agency’s efforts to distribute outreach materials to a broad range of DOJ personnel on the agency’s climate change policy, identify synergies with the SSPP and other relevant agency programs and plans (e.g., continuity of operations (COOP) plans) to implement priority climate change adaptation actions, and review and update the Adaptation Plan at least annually as a part of the SSPP.

1. POLICY FRAMEWORK FOR CLIMATE CHANGE ADAPTATION

The Department of Justice (DOJ) encompasses a variety of components that not only enforce Federal laws but also prosecute and incarcerate those who break the laws. The agency's mission is threefold: 1) prevent terrorism and promote the nation's security; 2) enforce Federal laws and represent the rights and interests of the American people; and 3) ensure the fair and efficient administration of justice.

Along with other Federal agencies, DOJ is required to comply with Executive Order (EO) 13514, "*Federal Leadership in Environmental, Energy, and Economic Performance*," which was signed by President Obama on 5 October 2009 to establish an integrated strategy toward sustainability in the Federal government. In compliance with Section 8(i) of EO 13514, DOJ has engaged in climate change adaptation planning to evaluate risks and vulnerabilities and manage both the short- and long-term effects of climate change on the agency's mission and operations.

The Justice Management Division (JMD) of DOJ has taken the lead in coordinating climate change adaptation planning for the agency. In this role, representatives from JMD have worked closely with the five major DOJ Bureaus: Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF); Federal Bureau of Investigation (FBI); Drug Enforcement Administration (DEA); Bureau of Prisons (BOP); and U.S. Marshals Service (USMS).

In April 2011, DOJ appointed Lee Lofthus, Assistant Attorney General for Administration and the Senior Sustainability Officer, to serve as the agency's senior official responsible for climate change adaptation planning. In June 2011, DOJ issued its Climate Change Adaptation Policy Statement:

DOJ will evaluate climate change and associated risks related to mission, policy, operations, and programs. DOJ will develop an implementation plan with long-term goals applying to programs such as real property acquisition, long-term leases, and facility construction. The Climate Change Implementation Plan [now called the Climate Change Adaptation Plan] will be completed by June 2012 and updated as needed.

DOJ will use the Charter from the Environmental Stewardship Council comprised of senior leadership from the ATF, FBI, DEA, BOP, USMS, and JMD, to lead and implement climate change adaptation efforts.

Also in June 2011, DOJ formally answered two guiding questions posed by the Interagency Climate Change Adaptation Task Force, which was convened in the spring of 2009 to address the increasing awareness of climate change impacts and determine the role of the Federal government in addressing those impacts. In response to the first question (*How is climate change likely to affect the ability of the agency to achieve its mission and strategic goals?*), DOJ identified three major areas: human health, water resources, and energy. In response to the second question (*How can DOJ coordinate and collaborate with other agencies to better manage the effects of climate change?*), DOJ identified both existing and potential collaborative opportunities with other Federal agencies on mission and contingency planning efforts and committed to participating in additional government-wide forums and partnerships on sustainability issues.

Table 1 summarizes DOJ’s progress toward fulfilling the requirements of Section 8(i) of EO 13514 by establishing and implementing a policy framework for climate change adaptation, analyzing risks and vulnerabilities, and performing adaptation planning in accordance with the Implementing Instructions established by the Interagency Climate Change Adaptation Working Group.

Table 1-1. DOJ Climate Change Adaptation Progress

Implementation Action ^a	Deadline	Status	Description
1. Identify senior agency official responsible for climate change adaptation planning (1)	4 Apr 2011	Complete	DOJ appointed Lee Lofthus, Assistant Attorney General for Administration and the Senior Sustainability Officer, as the senior agency official responsible for agency climate change adaptation planning.
2. Issue an agency-wide climate change adaptation policy (1); and submit to CEQ agency responses to two guiding questions (3)	3 Jun 2011	Complete	DOJ issued its Climate Change Adaptation Policy Statement and submitted to CEQ its responses to the two guiding questions.
3. Complete a preliminary high-level analysis of agency vulnerability to climate change; submit to CEQ three to five priority climate change adaptation actions that the agency will implement in FY12 (4)	30 Sep 2011	Complete	DOJ conducted a preliminary high-level analysis of agency vulnerability to climate change. Following this analysis, DOJ selected and submitted to CEQ four priority climate change adaptation actions for implementation in FY 2012.
4. Participate in interagency climate change workshops sponsored by CEQ and share lessons learned with other agencies (2, 5)	2011 and 2012	Complete	CEQ has sponsored a number of workshops to introduce Federal agency staff to the adaptation planning process. These workshops place particular emphasis on specific impacts likely to be relevant to Federal facilitates, operations, and programs. DOJ has participated in four of the workshops to date: 1) Getting Started with Climate Change Adaptation Planning, 2) Human Health, 3) Infrastructure, and 4) Land and Water Resources.
5. Complete a final high-level analysis of agency vulnerability to climate change (3)	Mar 2012	Complete	DOJ conducted a final high-level analysis of agency vulnerability to climate change.
6. Submit to CEQ an agency climate change adaptation plan for implementation in FY13 (4)	4 Jun 2012	Complete, with the finalization of this plan.	The DOJ Climate Change Adaptation Plan will be submitted to CEQ in June 2012 as part of DOJ's 2012 Strategic Sustainability Performance Plan (SSPP). During FY 2013 and beyond, DOJ will work with its Bureaus and other Federal agencies to execute the actions presented in this plan.

a – The Interagency Climate Change Adaptation Working Group Implementing Instructions called on the head of each Federal agency to 1) establish an agency climate change adaptation policy; 2) increase agency understanding of how the climate is changing; 3) apply understanding of climate change to agency mission and operations; 4) develop, prioritize, and implement actions; and 5) evaluate and learn. The numbers in parentheses in the above table represent these instructions.

2. AGENCY VULNERABILITY

As part of the climate change adaptation planning process, JMD and the five major DOJ Bureaus (ATF, FBI, DEA, BOP, and USMS) evaluated agency mission activities with respect to climate change impacts on critical assets and infrastructure. DOJ identified 8 high-risk, 12 medium-risk, and 48 low-risk assets. DOJ then further analyzed the high-risk assets and associated climate stressors. The climate change risks and opportunities identified by DOJ during the vulnerability analysis are summarized below. More detailed information on agency vulnerability cannot be published within this Adaptation Plan because it is considered sensitive to the DOJ mission.

The three highest-risk critical assets were determined to be **buildings, utilities** (including telecommunications (data and voice), power, and water) infrastructure, **and personnel**. Across these three major asset categories, DOJ most frequently identified severe weather and flooding as key climate stressors, followed by drought and temperature change, and then sea level rise. Common climate change vulnerabilities fell into four broad categories:

- **Physical damage to buildings and utilities infrastructure** caused by severe weather and flooding could directly reduce the utility of assets, limit access for personnel, and cause general disruption of operational services. This type of vulnerability is shared by federal agencies and private utility companies throughout the U.S. Within DOJ, JMD and its Commercial Building Managers work closely with the General Services Administration (GSA, the leaser) and utility companies to manage facilities and external utility disruptions.
- **Health impacts to personnel** resulting from drought, heat, severe weather, and flooding could reduce productivity. The reassignment of DOJ personnel to support emergency response activities following severe weather and flooding could result in additional health impacts.
- **Disruption of operations** resulting from potential unrest (and increased violence) among populations affected by severe weather, extreme heat, and drought – both within and outside of the U.S. – could place further strain on DOJ personnel and fiscal resources.
- **The diversion of fiscal resources away from routine maintenance** to emergency management could cause a gradual decrease in building and infrastructure capacity to support the mission.

DOJ identified numerous adaptive capacities to address these vulnerabilities, many of which could be implemented under existing programs and initiatives. Thus, the agency is well-equipped to implement adaptive strategies to mitigate the impacts of climate change. Examples of opportunities identified for adaptive capacity include the following:

- **Enhance existing systems and plans**, including continuity of operations (COOP) plans, telework plans, and health monitoring programs.
- **Confirm the ability and flexibility to quickly and effectively address direct physical damage** to buildings, utilities systems, and regional infrastructure.
- **Pursue adaptive designs** for new or upgraded facilities and infrastructure that are identified as high-risk for climate impacts.
- **Coordinate with other private and public sector organizations** to leverage resources, enhance regional infrastructure planning, and address national-scale issues related to climate change.

3. PROCESS OF AGENCY ADAPTATION PLANNING AND EVALUATION

DOJ has used a structured process to organize its approach to climate change adaptation planning and evaluation. This process has allowed DOJ to identify and explore climate change vulnerabilities, identify and prioritize actions to better understand and address climate change risks and opportunities, and develop a plan to implement those actions. DOJ will continue to use a structured approach to implement the Climate Change Adaptation Plan through managed distribution to regional and field personnel, continued monitoring to assess the success of the plan, and mechanisms to periodically review and update the plan. These processes are described below:

3.1 Vulnerability Analysis

In accordance with the Interagency Climate Change Adaptation Working Group Implementing Instructions, DOJ has conducted a high-level analysis of agency vulnerability to climate change. DOJ followed a structured process to confirm the full participation of agency stakeholders and collaborators in the analysis:

- DOJ formed an Adaptation Project Team consisting of representatives from JMD and the five major DOJ Bureaus (ATF, FBI, DEA, BOP, and USMS).
- JMD, serving its role as the lead coordinator of climate change adaptation planning within DOJ, engaged the project team in a preliminary vulnerability analysis of potential climate change impacts to mission, critical assets, and infrastructure. The group developed a climate change impacts matrix (or “crosswalk”) to summarize the results of this analysis. The crosswalk identified key mission areas for each Bureau, identified the asset categories likely to be at risk, and ranked the magnitude of each risk. The matrix also identified and described the most relevant types of climate change impacts to DOJ and proposed collaborative opportunities with other Federal agencies. The preliminary high-level vulnerability analysis was completed in September 2011.
- Following the preliminary analysis, JMD distributed information on the background and scope of DOJ’s climate change adaptation planning process to a broader collection of Bureau representatives. Outreach materials included a one-page fact sheet, an overview brief, and a formal request for Bureau support in the final vulnerability analysis.
- JMD organized and moderated meetings with the Adaptation Project Team and other Bureau representatives to further evaluate climate change risks and opportunities related to buildings, utilities, and personnel (i.e., the three key assets identified during the preliminary vulnerability analysis). Participants included emergency preparedness personnel, human resources managers, facility maintenance and operations personnel, data and telecommunications managers, strategic planners, continuity of operations managers, security managers, and leasing managers. Following these meetings, JMD created a final climate change vulnerability analysis matrix to identify the exposure, sensitivity, and adaptive capacity of each of the three key assets.

- JMD solicited and incorporated comments on the final vulnerability analysis from the DOJ Adaptation Project Team, other Bureau representatives, and DOJ leadership. The high-level vulnerability analysis was finalized in March 2012. DOJ will continue to use the results of this analysis to both inform and support agency-wide climate change adaptation planning in FY 2013 and beyond.

3.2 Adaptation Plan

Following the completion of the final high-level vulnerability analysis, JMD continued to collaborate with the Adaptation Project Team to assemble the DOJ Climate Change Adaptation Plan. The format and function of the Adaptation Plan is based upon the results of the vulnerability analysis as well as existing DOJ sustainability programs and policies that already are in place to confirm conformance with EO 13514. Thus, the Adaptation Project Team has identified cross-cutting actions that can be accomplished as part of the SSPP in FY 2013 and beyond. DOJ intends to use the following process to implement the Adaptation Plan:

- DOJ's Senior Sustainability Officer, Lee Lofthus, will endorse the DOJ Climate Change Adaptation Plan as part of the agency's SSPP and provide a general directive for implementation within the five major DOJ Bureaus (ATF, FBI, DEA, BOP, and USMS).
- DOJ will distribute the Adaptation Plan to the five major Bureaus. In consultation with the Adaptation Project Team, each Bureau will determine the best method for distributing the plan within its jurisdiction.
- JMD, in collaboration with the Adaptation Project Team, will create and update climate change adaptation outreach and educational materials for broad distribution among agency personnel. Outreach materials also will be developed and distributed at the Bureau level.
- DOJ and its Bureaus will identify synergies with existing programs and plans, including the SSPP, COOP plans, and telework plans, for implementing priority adaptation actions.
- In accordance with the performance measures identified in this Adaptation Plan, JMD and the Adaptation Project Team will monitor and evaluate the implementation of climate change adaptation actions. The team also will adjust actions as new information becomes available.
- JMD will periodically review and update the Adaptation Plan based upon feedback from Bureau representatives; evaluation of performance measures; collaboration with other Federal, state, and regional agencies; and consideration of new scientific information. Furthermore, JMD will track the official progress of the Adaptation Plan implementation and update the plan at least annually as a part of the agency's SSPP.

4. PROGRAMMATIC ACTIVITIES

DOJ will pursue programmatic activities to confirm the successful implementation and continuous monitoring of the Climate Change Adaptation Plan:

- **DOJ will determine the organizational capacity and structures needed to implement proposed climate change adaptation actions.** DOJ assumes that the agency's existing SSPP structure will serve as the primary coordination and implementation mechanism for climate change adaptation. However, DOJ will conduct a gap analysis to identify potential deficiencies in this mechanism and, if necessary, take action to address those deficiencies.
- **DOJ will integrate climate change adaptation into appropriate policies, programs, and operations.** Although the SSPP is assumed to be the primary mechanism for integrating climate change adaptation, DOJ may determine that additional plans and programs are appropriate integration mechanisms. For example, DOJ will consider the integration opportunities offered by existing programs and plans, including COOP plans, personnel plans, capital improvement plans, and health-and-safety plans.
- **DOJ will collaborate and share adaptation science and planning information with other Federal agencies.** DOJ will continue to participate in workshops, webinars, training, and educational sessions sponsored by CEQ and other Federal interagency organizations to pursue current adaptation science and planning information. Furthermore, DOJ will pursue collaborative opportunities with other Federal agencies, particularly those agencies facing similar climate change risks and opportunities. Thus far, DOJ has identified the following Federal agencies as key collaborators:
 - Department of Defense
 - National Oceanic and Atmospheric Administration
 - Department of Energy
 - Environmental Protection Agency
 - Federal Emergency Management Agency
 - Department of Homeland Security
 - General Services Administration
 - Centers for Disease Control
 - Occupational Safety and Health Administration
- **DOJ will coordinate adaptation planning with related efforts among state, local, tribal, and territorial partners.** The five major DOJ Bureaus (ATF, FBI, DEA, BOP, and USMS) frequently collaborate with state, local, tribal, and territorial partners in areas critical to mission execution and contingency planning. As part of this ongoing collaboration, the Bureaus may identify opportunities for scientific coordination and implementation of climate change adaptation actions. Where facilities are co-located with other federal, state, and local agencies, the Bureaus will work with these partners to address physical damage to buildings and utilities infrastructure and health impacts to personnel related to climate change.

5. ACTIONS TO UNDERSTAND CLIMATE CHANGE RISKS AND OPPORTUNITIES

DOJ intends to initiate four major actions to *understand* climate change risks and opportunities related to mission, programs, and operations in FY 2013 and beyond. These actions include a combination of detailed vulnerability assessments; monitoring; scientific, social, economic, and behavioral research; exploration of climate change scenarios; and studies of specific geographic areas, programs, and operations. These actions correlate with the four broad categories of climate change vulnerability previously identified by DOJ (see Section 2).

Actions 1U through 4U (where the “U” stands for actions to “understand” risks and opportunities) are summarized below. Each action is further described in the Action Sheets located at the end of this section. The Action Sheet identifies the vulnerability (i.e., risk/opportunity) that the action is intended to address, describes the action, identifies the agency lead, describes the scale and timeframe of the action, discusses methods for implementation, describes performance measurement and resource implications, identifies opportunities for inter-agency coordination, identifies challenges, and summarizes key accomplishments to date.

Climate Change Adaptation Fact Sheet

As the first step toward implementing the Climate Change Adaptation Plan, DOJ will disseminate a high-level agency-wide Climate Change Adaptation Fact Sheet for broad dissemination with DOJ.

5.1 **Action 1U – Increase Adaptive Capacity of Buildings and Utilities Infrastructure**

DOJ will identify with a greater level of detail – and map – agency buildings and utilities infrastructure deemed to be at the highest risk for climate change impacts. DOJ will use these data to support the selection of climate change adaptation actions and implementation strategies.

5.2 **Action 2U – Increase the Adaptive Capacity of Personnel and Assets**

DOJ will identify with a greater level of detail those locations within and outside of the U.S. where health impacts to personnel are currently occurring or will likely occur based upon future climate projections. These data will be used to support the selection of actions to address climate change risks and opportunities related to personnel health impacts.

5.3 **Action 3U – Anticipate and Avoid Disruption to Operations**

DOJ will identify with a greater level of detail those locations within and outside of the U.S. where population unrest related to climate change impacts currently is occurring or will likely occur based upon future climate projections. DOJ will use these data to support the selection of actions to address climate change risks and opportunities related to population unrest.

5.4 **Action 4U – Anticipate and Avoid Diversion of Fiscal Resources**

DOJ will identify and evaluate with a greater level of detail the situations and locations where fiscal resources have been or will likely be diverted to fund emergency management and response activities. These data will be used to support the selection of actions to address climate change risks and opportunities related to the diversion of fiscal resources.

Action 1U – Increase Adaptive Capacity of Buildings and Utilities Infrastructure		
<p>Vulnerability to be Addressed:</p> <p>Physical damage to buildings and utilities infrastructure caused by severe weather and flooding could directly reduce the utility of assets, limit access for personnel, and cause general disruption of operational services.</p>		
<p>Description of Action:</p> <p>Identify with a greater level of detail – and map – those buildings and utilities infrastructure that are deemed to be at the highest risk.</p>		
<p>Scale: National</p>	<p>Timeframe: FY 2013 Start, Ongoing</p>	<p>Lead: JMD, in collaboration with leaders from all five major DOJ Bureaus</p>
<p>Implementation Methods:</p> <ul style="list-style-type: none"> • Working closely with each Bureau, determine appropriate criteria for identifying high-priority at-risk buildings and utilities infrastructure. These criteria, which could differ for each Bureau, could include (but would not be limited to) the following: <ul style="list-style-type: none"> – Asset value; – Importance of asset to overall mission; – Past history of damage; – Short-term versus long-term risk; and – Location relative to high-risk areas previously identified on national or regional maps. • Using Geographic Information Systems (GIS), create datasets and maps to spatially communicate agency-wide and Bureau-specific vulnerabilities to inform future decisions on which types of climate change adaptation actions to pursue. 		
<p>Performance:</p> <p>Performance will be measured by the usefulness of the datasets and maps in selecting priority actions to address risks to buildings and infrastructure.</p>		<p>Resource Implications:</p> <p>This action can be accomplished using existing resources.</p>
<p>Challenges:</p> <ul style="list-style-type: none"> • Identifying accurate and accessible maps and models of climate change impacts. • Managing the security and limited dissemination of assembled DOJ datasets and maps. 		
<p>Accomplishments to Date:</p> <p>DOJ already has begun to determine the Bureau-specific criteria, assemble the required datasets, and create GIS-based maps to illustrate agency vulnerability.</p>		

Action 2U – Increase Adaptive Capacity of Personnel and Assets		
<p>Vulnerability to be Addressed:</p> <p>Health impacts to personnel resulting from drought, heat, severe weather, and flooding could reduce productivity. The reassignment of DOJ personnel to support emergency response activities following severe weather and flooding could result in additional health impacts.</p>		
<p>Description of Action:</p> <p>Identify with a greater level of detail those locations within and outside of the U.S. where health impacts to personnel are currently occurring or will likely occur based upon future climate projections.</p>		
<p>Scale: Global</p>	<p>Timeframe: FY 2013 Start, Ongoing</p>	<p>Lead: JMD, in collaboration with leaders from all five major DOJ Bureaus</p>
<p>Implementation Methods:</p> <ul style="list-style-type: none"> • Research existing information from major Bureaus to identify the incidence and frequency of climate-related health impacts to personnel. • Evaluate existing climate forecasts to identify future areas of greatest concern. • If necessary, conduct a survey of the most affected geographic locations and/or operations to gather more detailed information. • Consolidate and/or map resultant data to identify locations within the U.S. where health impacts to personnel are currently occurring or will likely occur. 		
<p>Performance:</p> <p>Performance will be measured by the usefulness of these data in the identification of highest risk locations and selection of actions to address climate change risks and opportunities related to personnel health impacts.</p>		<p>Resource Implications:</p> <p>This action can be accomplished using existing resources.</p>
<p>Challenges:</p> <ul style="list-style-type: none"> • Identifying accurate and accessible maps and models of climate change impacts. • Managing the security and limited dissemination of assembled DOJ datasets and maps. • Identifying and researching situations and locations outside of the U.S. 		
<p>Accomplishments to Date:</p> <p>DOJ already has begun to evaluate the incidence and frequency of existing health impacts to personnel through its previous vulnerability analyses.</p>		

Action 3U – Reduce Risk of Unrest Among Affected Populations		
<p>Vulnerability to be Addressed:</p> <p>Disruption of operations resulting from potential unrest (and increased violence) among populations affected by severe weather, extreme heat, and drought – both within and outside of the U.S. – could place further strain on DOJ personnel and fiscal resources.</p>		
<p>Description of Action:</p> <p>Identify with a greater level of detail those locations within and outside of the U.S. where unrest related to climate change impacts currently is occurring or will likely occur based upon future climate projections.</p>		
<p>Scale: Global</p>	<p>Timeframe: FY 2013 Start, Ongoing</p>	<p>Lead: JMD, in collaboration with leaders from all five major DOJ Bureaus</p>
<p>Implementation Methods:</p> <ul style="list-style-type: none"> • Research existing information from major Bureaus to identify the incidence and frequency of population unrest related to climate change impacts. • Evaluate existing climate forecasts to identify future areas of concern. • If necessary, conduct a survey of the most affected geographic locations to gather detailed information. • Consolidate and/or map resultant data to identify locations within and outside of the U.S. where unrest currently is occurring or will likely occur. 		
<p>Performance:</p> <p>Performance will be measured by the usefulness of these data in the identification of locations and the selection of actions to address climate change risks and opportunities related to population unrest.</p>		<p>Resource Implications:</p> <p>This action can be accomplished using existing resources.</p>
<p>Challenges:</p> <ul style="list-style-type: none"> • Managing the security and limited dissemination of assembled datasets and maps. • Identifying and researching situations and locations outside of the U.S. 		
<p>Accomplishments to Date:</p> <p>None.</p>		

Action 4U – Anticipate and Avoid Diversion of Fiscal Resources		
<p>Vulnerability to be Addressed:</p> <p>The diversion of fiscal resources away from routine maintenance to emergency management could cause a gradual decrease in building and infrastructure capacity to support the mission.</p>		
<p>Description of Action:</p> <p>Identify with a greater level of detail the situations and locations where fiscal resources have been or will likely be diverted to fund emergency management activities. Identify and describe those existing or predicted activities, and estimate the fiscal resources that may be diverted to address them.</p>		
<p>Scale: Global</p>	<p>Timeframe: FY 2013 Start, Ongoing</p>	<p>Lead: JMD, in collaboration with leaders from all five major DOJ Bureaus</p>
<p>Implementation Methods:</p> <ul style="list-style-type: none"> • Research existing information from major Bureaus to identify the incidence and frequency of emergency management activities. • Evaluate existing climate forecasts to identify future areas of concern. • Identify situations where funds have been diverted to support emergency management activities. • Consolidate and/or map resultant data to identify locations and situations within and outside of the U.S. where funding will likely be diverted to support emergency management activities. 		
<p>Performance:</p> <p>Performance will be measured by the usefulness of these data in identifying situations and locations where fiscal resources are likely to be diverted and selecting actions to address related risks and opportunities.</p>		<p>Resource Implications:</p> <p>This action can be accomplished using existing resources.</p>
<p>Challenges:</p> <ul style="list-style-type: none"> • Managing the security and limited dissemination of assembled datasets and maps. • Identifying and researching situations and locations outside of the U.S. 		
<p>Accomplishments to Date:</p> <p>None.</p>		

6. ACTIONS TO ADDRESS CLIMATE CHANGE RISKS AND OPPORTUNITIES

In conjunction with the actions described in Section 5 to better understand climate change risks and opportunities, DOJ intends to initiate four major actions to **address** climate change risks and opportunities related to its mission, programs, and operations in FY 2013 and beyond. These actions will be accomplished through a variety of means, including pilot activities and technologies, modifications to existing programs, formal integration and dissemination of adaptation policies, sharing of best practices, and collaboration. As with the actions described in Section 5, these actions correlate with the four broad categories of agency climate change vulnerability identified by DOJ (See Section 2).

Actions 1A through 4A (where the “A” stands for actions to “address” risks and opportunities) are summarized below. Each action is further described in the Action Sheets located at the end of this section. The Action Sheet identifies the vulnerability (i.e., risk/opportunity) that the action is intended to address, describes the action, identifies the agency lead, describes the scale and timeframe of the action, discusses methods for implementation, describes performance measurement and resource implications, identifies opportunities for inter-agency coordination, identifies challenges, and summarizes key accomplishments to date.

6.1 Action 1A – Increase Adaptive Capacity of Buildings and Utilities Infrastructure

Following the completion of Action 1U (described in Section 5 and intended to help the agency further understand this vulnerability), DOJ will implement strategies to increase the adaptive capacity of its buildings and utilities infrastructure, with the ultimate goal of reclassifying these high-risk assets to medium- or low-risk. Strategies may include examining lease terms for possible renovation or relocation options, researching adaptive responses to minimize risks, and examining capital improvement plans for opportunities to incorporate adaptive designs.

6.2 Action 2A – Increase Adaptive Capacity of Personnel and Assets

Following the completion of Action 2U, DOJ will enhance existing systems and plans, including COOP plans, telework plans, and health-monitoring programs, to improve the adaptive capacity of personnel and assets.

6.3 Action 3A – Anticipate and Avoid Disruption to Operations

Following the completion of Action 3U, DOJ will collaborate with other agencies and research options to reduce the risk of unrest among populations in areas where climate change impacts are occurring or are likely to occur based upon future climate projections. DOJ will pilot selected actions and then integrate those proven actions into the DOJ SSPP and/or other plans.

6.4 Action 4A – Anticipate and Avoid Diversion of Fiscal Resources

Following the completion of Action 4U, DOJ will collaborate with other agencies and research options to anticipate, mitigate, and avoid diversion of fiscal resources for emergency management activities. DOJ will pilot selected actions and then integrate those proven actions into the DOJ SSPP and/or other plans.

Action 1A – Increase Adaptive Capacity of Buildings and Utilities Infrastructure		
<p>Vulnerability to be Addressed:</p> <p>Physical damage to buildings and utilities infrastructure caused by severe weather and flooding could directly reduce the utility of assets, limit access for personnel, and cause general disruption of operational services.</p>		
<p>Description of Action:</p> <p>Confirm DOJ can quickly and effectively address direct physical damage to buildings, utilities infrastructure, and regional infrastructure. Pursue adaptive designs for new or upgraded facilities and infrastructure.</p>		
<p>Scale: National</p>	<p>Timeframe: FY 2013 Start, Ongoing</p>	<p>Lead: JMD, in collaboration with leaders from all five major DOJ Bureaus</p>
<p>Implementation Methods:</p> <ul style="list-style-type: none"> • Identify opportunities for adding adaptive capacity, including examining lease terms for possible renovation or relocation options, researching adaptive responses to minimize risks, and examining capital improvement plans for opportunities to incorporate adaptive designs. Partner directly with GSA to address the vulnerabilities of leased facilities. Collaborate with other agencies with similar vulnerabilities to share information. • Develop a baseline for performance measurement. • Identify high-priority, cost-effective, and transferable adaptive approaches to be institutionalized as best management practices to prevent future impacts to facilities where climate impacts are not imminent but can be avoided in the longer term. • Integrate selected actions into DOJ SSPP and/or other plans, including leasing plans and capital improvement plans. 		
<p>Performance:</p> <p>Performance will be measured by the number of high-risk facilities and utilities infrastructure that have adaptation measures in place.</p>		<p>Resource Implications:</p> <p>While the identification of opportunities and approaches will be pursued with existing resources, the execution of capital improvements will require redirected resources.</p>
<p>Challenge:</p> <p>None.</p>		
<p>Accomplishments to Date:</p> <p>None.</p>		

Action 2A – Increase Adaptive Capacity of Personnel and Assets		
<p>Vulnerability to be Addressed:</p> <p>Health impacts to personnel resulting from drought, heat, severe weather, and flooding could reduce productivity. The reassignment of DOJ personnel to support emergency response activities following severe weather and flooding could result in additional health impacts.</p>		
<p>Description of Action:</p> <p>Enhance existing systems and plans, including COOP plans, telework plans, and health-monitoring programs, to improve the adaptive capacity of personnel and assets.</p>		
<p>Scale: Global</p>	<p>Timeframe: FY 2013 Start, Ongoing</p>	<p>Lead: JMD, in collaboration with leaders from all five major DOJ Bureaus</p>
<p>Implementation Methods:</p> <ul style="list-style-type: none"> • Research options to effectively mitigate impacts to personnel and assets where those impacts are currently occurring or are likely to occur. Collaborate with other agencies with similar vulnerabilities to share information. • Develop a baseline for performance measurement. • Pilot and obtain feedback on the success of selected mitigation options. • Based upon the success of piloted projects and research results, identify high-priority, cost-effective, and transferable mitigation strategies to be institutionalized as best management practices to prevent future impacts to personnel and assets where climate impacts are not imminent but can be avoided in the longer term. • Integrate selected actions into DOJ SSPP and/or other plans, including COOP plans, telework plans, and health-monitoring programs. 		
<p>Performance:</p> <p>Performance will be measured by the placement of adaptation measures at the locations identified to pose high risk for health impacts to personnel.</p>		<p>Resource Implications:</p> <p>While research and certain pilot studies can be conducted using existing resources, the execution of best management practices could require redirected resources.</p>
<p>Challenges:</p> <p>Pursuing adaptation actions on a global scale.</p>		
<p>Accomplishments to Date:</p> <p>DOJ bureaus are piloting technologically advanced gear to minimize the impacts of heat stress on mission-critical field personnel. Several bureaus are evaluating the feasibility of telework programs, and others are modernizing and revitalizing health-and-safety programs.</p>		

Action 3A – Reduce Risk of Unrest Among Affected Populations		
<p>Vulnerability to be Addressed:</p> <p>Disruption of operations resulting from potential unrest (and increased violence) among populations affected by severe weather, extreme heat, and drought – both within and outside of the U.S. – could place further strain on DOJ personnel and fiscal resources.</p>		
<p>Description of Action:</p> <p>Anticipate and avoid disruption to operations resulting from population unrest and potential violence.</p>		
<p>Scale: Global</p>	<p>Timeframe: FY 2013 Start, Ongoing</p>	<p>Lead: JMD, in collaboration with leaders from all five major DOJ Bureaus</p>
<p>Implementation Methods:</p> <ul style="list-style-type: none"> • Research options to reduce the risk of unrest among populations in areas where climate change impacts are occurring or are likely to occur. Collaborate with other agencies with similar vulnerabilities to share information. • Develop a baseline for performance measurement. • Pilot and obtain feedback on the success of selected mitigation options. • Based upon the success of piloted projects and research results, identify high-priority, cost-effective, and transferable mitigation strategies to be institutionalized as best management practices to reduce unrest, potential violence, and resultant strain on DOJ personnel resources. • Integrate selected actions into DOJ SSPP and/or other plans, including COOP plans. 		
<p>Performance:</p> <p>Performance will be measured by the placement of adaptation measures at the locations identified to pose high risk to operations based on the potential for unrest.</p>		<p>Resource Implications:</p> <p>While research and certain pilot studies can be conducted using existing resources, the execution of best management practices could require redirected resources.</p>
<p>Challenges:</p> <p>Pursuing adaptation actions on a global scale.</p>		
<p>Accomplishments to Date:</p> <p>None.</p>		

Action 4A – Anticipate and Avoid Diversion of Fiscal Resources		
<p>Vulnerability to be Addressed:</p> <p>The diversion of fiscal resources away from routine maintenance to emergency management could cause a gradual decrease in building and infrastructure capacity to support the mission.</p>		
<p>Description of Action:</p> <p>Anticipate and, when possible, institute adaptive responses to avoid diversion of resources away from overall mission support in response to increased emergency management.</p>		
<p>Scale: Global</p>	<p>Timeframe: FY 2013 Start, Ongoing</p>	<p>Lead: JMD, in collaboration with leaders from all five major DOJ Bureaus</p>
<p>Implementation Methods:</p> <ul style="list-style-type: none"> • Research options to effectively mitigate impacts to personnel and assets where those impacts are currently occurring or are likely to occur. Collaborate with other agencies with similar vulnerabilities to share information. • Develop a baseline for performance measurement. • Pilot and obtain feedback on the success of selected mitigation options. • Based upon the success of the piloted projects and research results, identify high-priority, cost-effective, and transferable strategies to be institutionalized as best management practices to eliminate or mitigate the fiscal impacts of emergency management activities resulting from climate change. • Integrate selected actions into DOJ SSPP and/or other appropriate plans, including COOP plans and health-and-safety plans. 		
<p>Performance:</p> <p>Performance will be measured by analyzing the percentage of locations at risk of resource diversion that either have adaptation measures in place or have reduced the incidence of funding diversion.</p>		<p>Resource Implications:</p> <p>While research and certain pilot studies can be conducted using existing resources, the execution of best management practices could require redirected resources.</p>
<p>Challenges:</p> <p>Pursuing adaptation actions on a global scale.</p>		
<p>Accomplishments to Date:</p> <p>None.</p>		