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# Climate Risk Management for USAID Projects and Activities

## A Mandatory Reference for ADS Chapter 201

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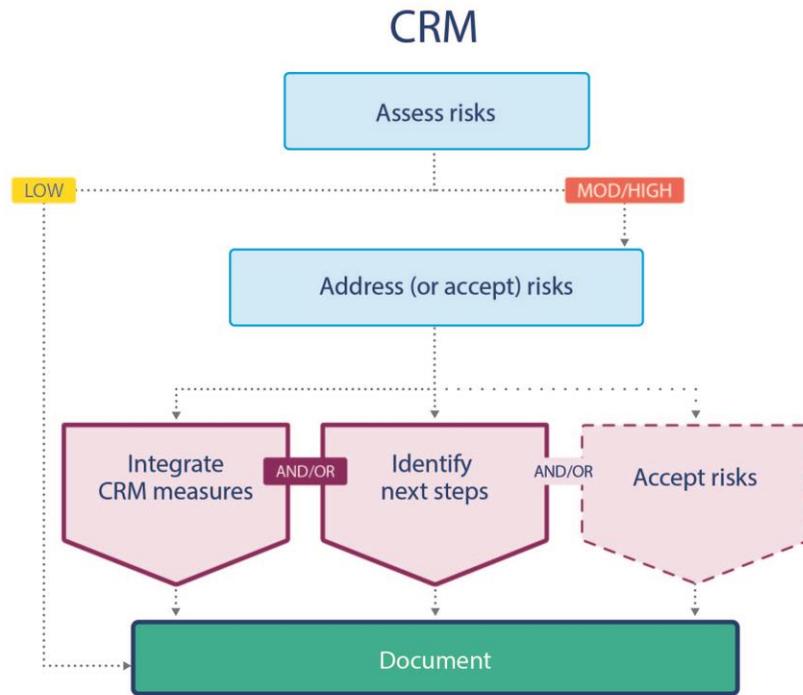
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## EXECUTIVE SUMMARY

The adverse impacts of climate change, including sea-level rise, increases in temperatures, more frequent extreme precipitation and heat events, more severe droughts, and increased wildfire activity, along with other impacts of greenhouse gas emissions, such as ocean acidification, threaten to roll back decades of progress in reducing poverty and improving economic growth in vulnerable countries, compromise the effectiveness and resilience of U.S. development assistance, degrade security, and risk intranational and international conflict over resources. Climate risk management (CRM) is the process of assessing, addressing and adaptively managing climate risks that may impact the ability of USAID programs to achieve objectives. For USAID's purposes, climate risks are potential negative consequences due to changing climatic conditions.

This document provides guidance for climate risk management in USAID projects and activities and is a companion piece to [Climate Change in USAID Strategies](#). With a few exceptions, USAID Project and Activity Design Teams are required to identify relevant climate risks and then qualitatively assess them as low, moderate or high, unless the project or activity falls under a development objective (DO) or intermediate result (IR) that was rated low risk as part of a strategy-level climate risk screening. If moderate or high climate risks are present, design teams must address them by 1) Integrating risk management measures into the current phase of the Program Cycle and/or 2) Identifying risk management measures appropriate for future stages of the Program Cycle (see Figure 1). In some cases, the design team may accept a/some risk(s) upon consideration of tradeoffs and how USAID can best achieve its development objectives. If low climate risk is identified, no further action is required beyond documenting that low risk was identified. CRM for USAID should be "fit for purpose," i.e. detailed enough to inform decision-making but not overly costly or burdensome.

The CRM processes and results—including identified climate risks, risk ratings, how risks are addressed, opportunities and any further analysis needed—must be documented in Project Appraisal Documents (PADs) and Environmental Compliance Analyses (typically found in an Initial Environmental Examination (IEE)). The results should also be integrated into USAID solicitations and awards as appropriate. Incorporating CRM in monitoring, evaluation and learning (MEL) fosters continuous improvement to climate-resilient strategies, project design, and implementation. USAID has a host of resources available to support CRM.



**Figure 1: CRM is an iterative process that should be conducted at each stage of the program cycle.**

## Resources and Support

USAID/Washington's Global Climate Change Office and Regional and Pillar Bureaus provide a variety of resources to support climate risk management efforts, including:

- [Climate Risk Screening and Management Tools](#) on USAID's intranet assist staff in assessing and addressing climate risks in each of the sectors in which USAID works;
- [Country- and Region-specific Climate Risk Profiles](#) summarize existing information on current and projected climate conditions; and
- Bureau-specific resources and supplemental guidance. Refer to the Bureau Climate Integration Lead.

Agency-wide resources for CRM can be found on the [USAID Climate Risk Management intranet site](#). Implementers and others may consult publicly available resources at [Climatelinks](#).

Each Bureau and Mission has a designated Climate Integration Lead (CIL) who can provide support. The [full list of CILs](#) and their responsibilities is also available on the USAID intranet. Bureau-level responsibilities are determined by each Bureau.

In addition, USAID/W staff and contractors are available to provide virtual and/or in-person support. USAID staff may email [climatechange@usaid.gov](mailto:climatechange@usaid.gov).

## 1. APPLICABILITY OF THE GUIDANCE

This mandatory reference provides guidance for field-based Operating Units (OUs) (Missions) and Washington OUs on managing climate risks in USAID projects and activities. All projects and activities, whether designed by Missions or Washington OUs, are required to assess and address climate risks, with a few exceptions defined below:

- 1) Funds planned for Administration and Oversight (Objective 6.1) and Program Design and Learning (Objective 6.2) of the Foreign Assistance Framework;
- 2) International Disaster Assistance (IDA) account funds;
- 3) Food for Peace Title II emergency food assistance programs;
- 4) Projects or activities funded using only GCC/Adaptation funds;<sup>1</sup> and
- 5) The following types of mechanisms: general budget/balance of payment support; sector budget support/program assistance; commodity import programs; local currency program trust funds or special accounts; endowments; excess United States Government (USG) property programs, multi-donor trust funds, single-

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<sup>1</sup> Projects or activities that are *partially funded* by GCC/Adaptation funds are still required to complete this process.

donor trust funds managed by foreign public entities (FPEs) or bilateral development partners, and program support to FPEs.

In addition, tailored processes for screening contingency programming (e.g., Complex Crises Funds and programs managed by the Office of Transition Initiatives (OTI)) will be developed by the Democracy, Conflict and Humanitarian Assistance (DCHA) Bureau. All exceptions must be documented in activity approval documents or Environmental Compliance Analyses such as IEEs, as appropriate.

## **2. INTRODUCTION AND BACKGROUND**

Climate variability and change<sup>2</sup> is a cross-cutting issue that can undermine development progress and increase risk and insecurity in developing countries. For example, increases in temperature and changes in precipitation patterns could significantly affect crop yields from rain fed agriculture and shift the geographic range and incidence of vector-borne diseases. The impacts of climate change can also compound social, political and economic stresses. At the same time, climate change challenges offer important opportunities and incentives to take actions that contribute to development. By considering climate risks and opportunities at the strategy, project and activity level as part of the planning and design process, USAID can increase the sustainability and impact of its investments.

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<sup>2</sup> In this document, the term “climate change” refers to both climate variability and climate change. “Climate variability” refers to variations in climate (including the normal highs and lows, wet and dry periods, hot and cool periods and extremes) and can refer to day-to-day variability, year-to-year variability and even decadal scale variability. In this document, “climate change” refers to those variations as well as persistent change in climate over decades or longer (USAID, 2014. Climate-Resilient Development: A Framework for Understanding and Addressing Climate Change.).

### 3. OVERVIEW OF CLIMATE RISK MANAGEMENT IN THE PROGRAM CYCLE

Climate risk management (CRM) is the process of assessing, addressing and adaptively managing climate risks. For USAID’s purposes, climate risks are potential negative consequences on projects or activities due to changing climatic conditions. The goal of CRM is to both render USAID’s work more climate resilient (i.e., better able to anticipate, prepare for and adapt to changing climate conditions and withstand, respond to and recover rapidly from disruptions) and to avoid maladaptation (i.e., development efforts that inadvertently increase climate risks). By using climate risk assessments to inform decision-making at the strategy, project and activity levels, USAID is better able to manage climate risks and more effectively pursue its mission to end extreme poverty and to promote resilient, democratic societies while advancing our security and prosperity.

CRM is an iterative process that flows through all steps of the USAID Program Cycle (see Figure 2). It includes designing and implementing for uncertainty through informed decision-making. CRM means programming for a range of possible future climate scenarios and building in flexibility to adjust and adapt to a changing climate during the timeframe over which a strategy, project or activity is expected to confer benefits. This document outlines how CRM should be conducted during project and activity design; it should then be continued through implementation using adaptive management based on relevant climate change information.

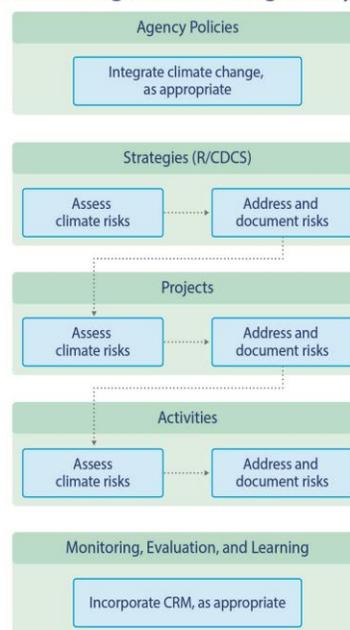
USAID’s Program Cycle provides key entry points for considering climate change as a cross-cutting issue in USAID’s international development work. USAID OUs are required to implement climate risk management in:

- Agency-level policy documents,(see [Annex: Climate Change Requirements in New Agency Policies](#))
- [Regional and Country Development Cooperation Strategies](#) (R/CDCSs), and
- Project/Activity design and implementation, including PADs and solicitations (the focus of this document).

In addition, monitoring, evaluation, and learning (MEL) can support CRM throughout the Program Cycle (see [“CRM and Monitoring, Evaluation, and Learning”](#) below).

Operating Units should clarify the process so that roles, responsibilities and clearance processes are clear. They might do so through project design guidance or mission

CRM Throughout the Program Cycle



**Figure 2: CRM flows through all steps of the program cycle**

orders. In general, the main responsibility for CRM at the project and activity level rests with design teams. While the Climate Integration Lead (CIL) and/or Mission/Bureau Environment Officer (M/BEO) may play a role, their function is primarily oversight. They are not responsible for completing CRM on behalf of the design teams.

To carry out CRM, USAID Project and Activity Design Teams (design teams) will first identify climate risks and then assess them as low, moderate or high. If moderate or high climate risks are present (see below), they must be addressed using any of the following approaches:

- 1) Integrating risk management measures into the current phase of the Program Cycle (such as shifting geographic focus at the project level), and/or
- 2) Identifying risk management measures appropriate for future stages of the Program Cycle and the CRM approach (including the need for additional analysis) to be used moving forward.

In some cases, the design team may accept a/some risk(s) upon consideration of tradeoffs and how USAID can best achieve its development objectives. In all cases of moderate or high risk, the design team must document how they addressed the risks and/or why they accepted the risk(s).

### **USAID's Definitions of Low, Moderate and High Climate Risk Ratings**

Climate risk is the potential for negative consequences due to changing climatic conditions. The focus of climate risk management at USAID is on the risk to USAID development programs. This risk consists of individual climate risks—potentially severe adverse consequences for development programs resulting from the interaction of climate-related hazards with the vulnerability of societies and systems exposed to climate change. A climate risk may arise when something is exposed to a climate stressor such as higher temperatures, flooding or drought. **The level of risk increases both as the severity of negative impact increases and as the probability of negative impact increases (see Table 1).**

Quantitatively assessing climate risk is difficult due to uncertainty about the magnitude and likelihood of climate impacts, the context- and site-specific nature of climate risks, and the difficulty in quantitatively comparing different types of potential consequences (e.g. economic output, morbidity and ecosystem disruption). Therefore, design teams should use technical judgment to qualitatively categorize climate risks to the Project or Activity outcomes as low, moderate or high. The question of how easy or challenging it will be to manage the risk should not affect the risk rating; rather, design teams should consider their willingness and the willingness of beneficiaries to accept the potential negative consequences. Climate risks should be considered in the context of other risks and factors as should the interactions between climate risks and between climate risks and other factors.

Design teams must document their rationale for low, moderate or high risk ratings as described in this guidance.

**Table 1: Risk ratings**

	<b>PROBABILITY OF NEGATIVE IMPACT</b> (increases from left to right)		
<b>SEVERITY OF NEGATIVE IMPACT</b> (increases from top to bottom)	Low probability Low impact <b>LOW RISK</b>	Moderate probability Low impact <b>LOW RISK</b>	High probability Low impact <b>LOW RISK</b>
	Low probability Moderate impact <b>LOW RISK</b>	Moderate probability Moderate impact <b>MODERATE RISK</b>	High probability Moderate impact <b>MODERATE RISK</b>
	Low probability High impact <b>MODERATE RISK</b>	Moderate probability High impact <b>HIGH RISK</b>	High probability High impact <b>HIGH RISK</b>

**Low climate risk** – the above table indicates four scenarios (in green) that would be considered low climate risk to the achievement or sustainability of project or activity outcomes. As an example, in a region expecting slight increases in temperature and precipitation, favoritism influencing the provision of assistance after crop failure may pose a low risk to a governance initiative focused on anti-corruption reform in the judiciary (low probability, low impact).

**Moderate climate risk** – the above table indicates three scenarios (in orange) that would be considered moderate climate risk to the achievement or sustainability of project or activity outcomes. An example of a moderate climate risk is the potential consequence of increasing sea surface temperature, causing coral reef bleaching and subsequent reduction in wild fish populations, on a coastal fisheries management and food security program (moderate probability, moderate impact).

**High climate risk** – the above table indicates two scenarios (in red) that would be considered high climate risk to the achievement or sustainability of project or activity outcomes. An example of a high climate risk is damage due to sea level rise coupled with increasing storm surge on planned coastal transportation infrastructure (high probability, high impact).

The CRM process described in this document may also assist design teams to identify potential development opportunities associated with current and expected climatic changes. These opportunities can take a few forms. First, there may be chances to achieve multiple development objectives (including climate change mitigation) in many USAID projects and activities, including those that may only low climate risks. For example, in some countries, climate change is viewed as a relatively non-partisan political issue and in such cases; it can provide a novel entry point for traditional civil society strengthening and capacity building programs. Secondly, there may be “windows of opportunity” that are created by recently adopted policies or changing attitudes. Finally, in some cases, changing climate conditions may potentially provide

opportunities; for example, rising temperatures in some areas could extend growing seasons. Design teams are encouraged to identify opportunities and consider trade-offs as they move through the Program Cycle and integrate opportunities into their projects and activities as appropriate.

### **Climate Change Mitigation**

While USAID's approach to CRM focuses on addressing the risks of potential impacts caused by climate change, design teams may also want to consider how their projects and activities can contribute to climate change mitigation (e.g. reduction of the greenhouse gases that cause climate change) as a way to address the global risk caused by climate change itself. Addressing climate change mitigation is not a required part of the Climate Risk Management process, but is encouraged per the USAID Climate Change and Development Strategy.<sup>3</sup> This may be done under CRM, through USAID's environmental compliance process or in some other manner.

## **4. CLIMATE RISK MANAGEMENT FOR PROJECTS AND ACTIVITIES**

CRM is an iterative and adaptive process, where risks and risk ratings are reconsidered as new information on either programmatic approaches or expected climate impacts becomes available. At each step along the Program Cycle, design teams should build upon the results of the assessment done at previous stages. New climate risks may become apparent as the Program Cycle progresses and areas of programmatic focus or approach become more detailed. For instance, infrastructure and construction investments are often not identified until activity design, but because these kinds of interventions may be quite vulnerable to climate change, climate risk management must be conducted as soon as these interventions are identified. Therefore, design teams should be aware that risks and risk ratings may change as design progresses.

At the same time, CRM for USAID should be “fit for purpose,” i.e. detailed enough to inform decision-making but not overly costly or burdensome. Climate risk assessment is considered adequate once the design team feels it has the information necessary to integrate risk management at the relevant stage of the Program Cycle and determine next steps for future stages. For example, detailed, site-specific information about expected sea level rise and storm surge may not be needed when drafting health strategies or projects. But, as programming becomes more detailed in activity design and/or implementation, detailed, site-specific information may be needed to inform siting, design parameters and other considerations associated with clinic construction.

CRM is not a standalone process; it should be done within the context of the many other considerations that enter into project and activity design. Thus, it should inform and be informed by any other assessments and consultations being done. In the case where some assessments precede the CRM process, those assessments and/or consultations may need to revisit proposed changes to the design. This is important to avoid

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<sup>3</sup> USAID Climate Change and Development Strategy (2012–2016). Available at: <https://www.usaid.gov/climate/strategy>.

unintended negative environmental and social consequences. Similarly, climate stressors should be considered in the context of non-climate stressors.

### Climate Risk Management for Project Design

Figure 3 outlines the overall process of climate risk management at the project level. The goal of a project-level risk assessment is to identify 1) all climate risks that will be addressed through project design (e.g. in the PAD), 2) climate risks that will be addressed through activity design and implementation to the extent possible and 3) the need for further analysis later in the Program Cycle in order to further manage climate risks.

#### Phase One: Project Design Planning

In phase one of project design, the design team defines the preliminary purpose of the proposed project and a roadmap of the analytic steps necessary to complete the PAD. This phase concludes in an approved Project Design Plan (PDP). In this phase, the project design team should review results from the strategy-level screening, if conducted. If the project falls under a DO, Intermediate Result (IR), or Sub-IR that was rated low risk at the strategy level, no further assessment is required at the project level. However, design teams are encouraged to engage in climate risk management whenever new information indicates that climate risks and/or opportunities should be reconsidered.

If the strategy-level screening has not been conducted or if the project falls under a DO, IR or Sub-IR that was rated moderate or high risk, the design team must determine how to assess climate risks at the project level, using screening, in-depth analysis and/or existing analyses. More details on the options for assessing climate risks are discussed in the section “[Options for Assessing Climate Risks](#)” below. The plan for how the team will carry out the climate risk assessment must be outlined in the PDP.

#### Phase Two: Project Design

In this phase, the design team must decide how to address the risks identified in the project-level assessment. If only low risks were found, no additional

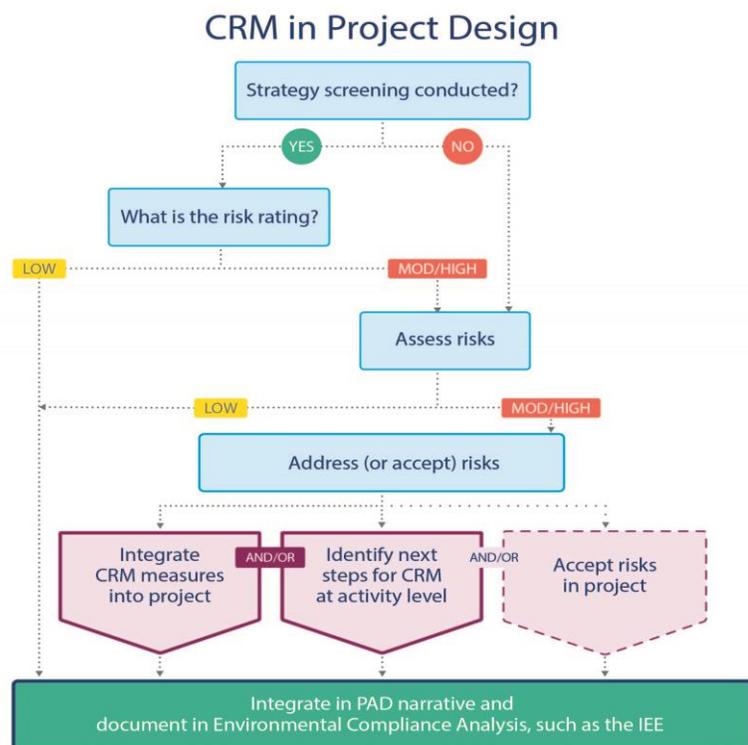


Figure 3: Climate Risk Management for Project Design

action to address them is required. In the case of moderate or high risks, the design teams must address each risk through one of the following methods and ensure the results are integrated into the project's theory of change:

- Integrate risk management measures into the project design. For example, climate risks might necessitate shifting major aspects of the project, such as the geographic region or programmatic approach, or they could inform design elements through adjustments or additions to the planned interventions; or
- Identify risk management measures appropriate for future stages of the Program Cycle (ADS 201.3.1.3), in particular Activity Design and Implementation, and the CRM approach (including the need for additional analysis) to be used moving forward.

In some cases, the design team may accept a/some risk(s) upon consideration of tradeoffs and how USAID can best achieve its development objectives. In all cases of moderate or high risk, the design team must document how they addressed the risks and/or why they accepted them. The design team must outline how it will carry forward the CRM process from project to activity design and implementation. This is because approaches, interventions, next steps and geographic focus areas may not be sufficiently detailed at the time of project design to adequately assess the climate risks associated with the project. This could include more in-depth analysis to better understand high climate risks, if appropriate. However, it is important to remember that CRM need only be "fit for purpose" - i.e., providing sufficient information to inform decisions based on the best professional judgment of the project design teams while not being overly costly or burdensome.

### **Uncertainty**

As in many areas of development, there is significant certainty about some climate change impacts and significant uncertainty around others. It is important to clarify what is known and what is uncertain, and to plan appropriately. For example, there may be significant certainty around temperature increases and even around the magnitude of that increase in certain timeframes, while contradictory scenarios around potential changes in the amount of rainfall. It is important to identify where the level of confidence is strong and plan for specific impacts. However, in cases where there is uncertainty, it is also important for that uncertainty to factor into climate risk ratings and into the approaches for addressing climate risk. CRM means programming for a range of possible future climate scenarios, building in flexibility to adjust and adapt to a changing climate during the timeframe over which a project or activity is expected to confer benefits, favoring choices that still generate benefits if climate changes to a greater or lesser extent, and managing risk in an adaptive manner.

## **Required Documentation**

The plan for project-level climate risk assessment, building on the outcomes of the strategy-level assessment if conducted, must be outlined and documented in the PDP during phase one of PAD development, if applicable. The climate risk assessment should then be completed such that it can be included in the final draft of the PAD.

The climate risk management process and its results must be documented in the PAD. For projects that fall under a screened DO or IR that was rated low risk, a statement to that effect should be included in the PAD narrative and Summary of Conclusions from Analyses.

For all other projects, the PAD narrative must contain a summary of the climate risk assessment methodology and the main results of the assessment. These results must include:

- a. a summary of the most significant climate risks to the project (including all those that are moderate or high),
- b. a discussion of how the project addresses those risks,
- c. the rationale behind the acceptance of any climate risks, and
- d. a summary of how the climate risk management process will be continued at the activity level (including risks that will be addressed through activity design and/or implementation as well as further risk analysis to be conducted, if any).

In addition to the narrative summary, Table 1 below and a description of the risk assessment methodology must be included in the Summary of Conclusions from Analyses section of the PAD. Table 1, or the bureau equivalent, must also be included in the Project's Environmental Compliance Analysis (e.g., IEE), if applicable.

Opportunities to strengthen climate resilience should also be documented in Table 1. They may also be included in the PAD narrative or incorporated later during activity design or implementation. Documenting these opportunities supports adaptive management by providing options to consider if circumstances change.

## **CRM Guidance for Washington OUs**

Washington OUs that design field-based programmatic activities should use the process outlined in this guidance to manage climate risks for any programming in specific geographies or countries. However, the scopes of many centrally-managed projects and activities are global rather than country- or region-specific. For global investments, such as global research programs that cut across many countries, design teams should assess risks by considering how the types of impacts associated with climate change may affect their programming. Global programs will often be able to centrally address risks that might be inherent in numerous USAID field-based projects and/or activities. For example, a centrally-managed agriculture program could develop tools for assessing and addressing climate risks for USAID's field programs that support decision-making related to agriculture programming. Most global programs will address climate risks at a fairly high level. One of the outputs of the climate risk management process should be an indication of where further climate risk management efforts would be needed for country-specific interventions. In those cases, the activity manager should consult with the AOR/COR, and country-level assessment should be conducted and the results included in supplemental Environmental Compliance Analysis, such as a supplemental IEE.

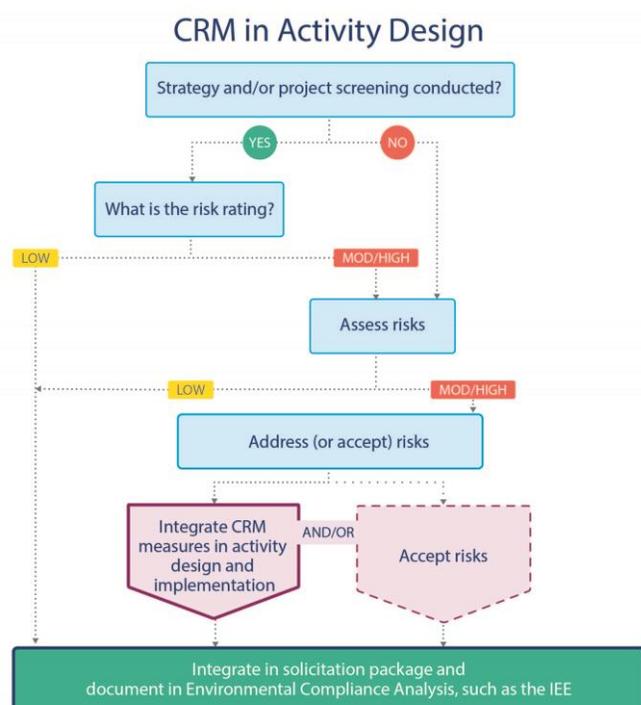
**Table 1.** Project-Level Climate Risk Management Summary Table for the PAD with examples. The completed table must include the following fields, at a minimum.

<b>Defined or Anticipated Project Elements</b> (Purpose/ Sub-purpose, Area of Focus, or Activity/ Mechanism, etc.)	<b>Climate Risks</b> List key risks related to the project elements identified through either the strategy- or project-level climate risk assessment.	<b>Risk Rating</b> Low/ Moderate/ High	<b>How Risks are Addressed at Project Level</b> Describe how risks have been addressed at the project level. If a decision has been made to accept the risk, briefly explain why.	<b>Further Analysis and Actions for Activity Design/ Implementation</b> Describe CRM measures to be integrated into activity design or implementation, including additional analysis, if applicable.	<b>Opportunities to Strengthen Climate Resilience</b> Describe opportunities to achieve development objectives by integrating climate resilience or mitigation measures.
<i>Improving livestock productivity</i>	<i>Heat stress due to increasing temperatures</i>	<i>High</i>	<i>Target support to more heat tolerant sheep/goats rather than cattle</i>		<i>Drought early warning systems (with DRR or S&amp;T programs).</i>
	<i>Mortality from increasingly frequent/ severe drought</i>	<i>High</i>		<i>Improve fodder storage/ banking strategies Improve access to insurance</i>	<i>Conflict prevention with DG programs as water becomes more scarce. Leverage the government's increasing focus on climate change adaptation and agricultural extension.</i>
	<i>Loss of livestock due to sea level rise and storm surge</i>	<i>Low (upland focus areas)</i>	<i>NA</i>	<i>NA</i>	

## Climate Risk Management for Activity Design

Figure 4 outlines the climate risk management process at the activity level. Climate risk assessment must be conducted at the activity level if 1) a project- and strategy-level assessment was not completed, which includes cases where the activity does not fall under a project<sup>4</sup> or 2) moderate/high risks were identified in the strategy- or project-level assessment and the design team determined that information about the project's approach and/or the relevant climate change impacts was not adequate to assess or address the risks. Climate risk management at the activity level should build upon the results of climate risk management done at the strategy or project level, when conducted, so the first step for design teams is to review those results.

**Figure 4: Climate Risk Management for Activity Design**



The options for conducting a climate risk assessment at the activity level are the same as for the project level and are summarized in the section "[Options for Assessing Climate Risks](#)" below. Climate risk assessment may be conducted by USAID, implementers, or both. USAID's implementers can be important partners in helping identify and address climate risks, selecting priority interventions and building innovative approaches into programs. It is important to integrate results from project and/or activity-level climate risk assessments into solicitation packages and require implementers to respond in their proposals and project implementation. However, asking implementers to lead both on the analysis and the intervention can miss opportunities for design teams to make strategic choices in the program approach and leave USAID project managers with less understanding of the climate risks involved (see discussion below on [Options for Assessing Climate Risks](#)). Additionally, it can potentially lead to bias

towards previously intended interventions. If design teams choose this option, they must ensure that the results of the assessment inform intervention design and implementation through the activity work plan and activity MEL processes. Whatever method is chosen, the goal of climate risk assessment at the activity level is to identify ways in which to integrate measures to address climate risks into activity design and/or to provide instructions to implementers to ensure that they adequately assess and address climate risks throughout implementation.

If the assessment identified only low risks for the activity, additional action to address these risks is not required. However, design teams are encouraged to continue to monitor how climate change may be impacting the activity, since circumstances may

<sup>4</sup> Please see the applicability section of the project design guidance (201.3.3.2) as to when and why stand-alone activities may occur. This includes cases when the activity does not fall under a PAD.

change. The portfolio review process provides one way to monitor the climate resilience of all activities by explicitly looking at how climate change may be impacting activities (see [CRM and Monitoring, Evaluation and Learning](#) below).

If the assessment indicates moderate or high risks, each risk must be addressed by integrating risk management measures into the activity design and/or its implementation. In some cases, the design team may accept a/some risk(s) upon consideration of tradeoffs and how USAID can best achieve its development objectives. In all cases of moderate or high risk, the design team must document how they addressed the risks and/or why they accepted them.

### **Climate Change and Construction**

Climate change is expected to increase the frequency and intensity of extreme weather events such as droughts, heat waves, storms, floods and landslides. The impact of these sudden events, in addition to the gradual change in climate effects over time, will increase the stress on the vital infrastructure systems that USAID invests in, and will require new investments to adapt to the changing conditions through corresponding changes in infrastructure design and construction.

USAID internally screens for all potential risks associated with activities that include construction investments during the planning and activity design phase. However, because the law requires formal architecture and engineering (A&E) plans to define the parameters of the infrastructure system, detailed risk assessment and the processes for integrating climate change considerations into construction projects are part of the A&E design phase, and this responsibility is thereby outsourced (allocated) to the designer of record (DOR) .

USAID design teams considering including construction activities in new projects should be aware of potential impacts from climate change and ensure that procurement documents, agreements and/or contracts include requirements to conduct appropriate A&E design and risk management procedures that include climate change considerations.

### **Required Documentation**

The Activity Environmental Compliance Analysis (e.g., IEE) must include a summary of the approach to activity-level CRM and major results, as well as a completed version of the summary table below.

**Table 2:** Activity-Level Climate Risk Management Summary Table with examples. The completed table must include the following fields, at a minimum.

<b>Tasks/ Defined or Illustrative Interventions</b>	<b>Climate Risks</b> List key risks related to the defined/ illustrative interventions identified in the screening and additional assessment.	<b>Risk Rating</b> Low/ Moderate/ High	<b>How Risks are Addressed</b> Describe how risks have been addressed in activity design and/or additional steps that will be taken in implementation. If you chose to accept the risk, briefly explain why.	<b>Opportunities to Strengthen Climate Resilience</b> Describe any opportunities to achieve multiple development objectives by integrating climate resilience or mitigation measures.
<i>Task 1: Support local water utility sustainability</i>	<i>Lack of raw water to extend water to new customers due to shifting precipitation patterns</i>	<i>High</i>	<i>Support utility efforts to put in place infiltration wells in catchment areas</i>	<i>Consider building to withstand a 500-year flood.</i>
	<i>Storm surge may damage utility infrastructure in coastal areas</i>	<i>Moderate</i>	<i>Work with utilities to survey infrastructure to fully assess risk in target districts</i>	
<i>Task 2: Support small scale non-utility water systems</i>	<i>Infrastructure may be damaged by storm surge</i>	<i>Moderate</i>	<i>Accept. Most vulnerable populations without access to water are in low lying delta areas.</i>	<i>Consider building to withstand a 500-year flood.</i>

The results of activity-level CRM should also be incorporated into solicitations and awards. The activity solicitation should reflect how climate risks have been addressed. USAID has a host of resources available on how to integrate climate change (see [Resources and Support Box](#)), including a document “Sample Language for Integrating Climate Change in Solicitations.” Implementers should address climate risks in their proposals and routine reporting to USAID.

## 5. OPTIONS FOR ASSESSING CLIMATE RISKS

Climate risk assessments may take a variety of forms, but they are all based on information about current and expected climate change and associated impacts and opportunities. Project and activity design teams will need different levels of climate information to guide their evaluation of those risks and how to address them, depending on 1) the climate risks faced in the relevant sectors and geographies over the relevant time period, 2) where they are in the Program Cycle and the level of detail and specificity in their programming, and 3) their operating constraints. Climate risk assessments could range from simple narrative descriptions of ways in which climate variability and change may affect community livelihoods to complex technical analyses of infrastructure design options under a range of climate change scenarios. Climate risk assessments should be “fit for purpose,” i.e. detailed enough to inform decision-making but not overly costly or burdensome.

Project and activity design teams can use any combination of the methods below to assess climate risks:

1. *USAID’s Climate Risk Screening and Management Tools* - These tools provide a systematic way to identify key climate risks, adaptive capacity, opportunities, options to address risks, accepted risks and next steps. Sector-based examples and guiding questions are included to stimulate thinking. Three separate but similar tools are available for strategy-, project- and activity-level planning. These culminate in the tables required by the Mandatory References for climate risk management.
2. *Tailored Climate Risk Analysis* - Climate risk analysis can be done using a variety of other methodologies to answer a wide array of questions about climate risks, depending on the needs of the design teams. For instance, it can be designed to analyze climate risks to a particular sector or sub-sector and focus on the specific geographies where the mission will work. They can be done in-house or commissioned. USAID climate change experts in Missions or USAID/Washington can help determine what type of analysis is appropriate. A variety of technical resources on climate risk and vulnerability assessment are available. (see box on [Resources and Support](#))
3. *Existing Climate Change Vulnerability or Risk Analysis of Appropriate Scale or Focus* - Other donors and international organizations may have conducted a climate change vulnerability assessment or climate risk analyses for the geographies, sectors and timeframes in question. In some cases, there may even be a vulnerability assessment produced by USAID. Where existing analysis on climate change impacts is publicly available and technically sound, this approach may be a good way to streamline the CRM process. However, design teams are still responsible for ensuring that these analyses address relevant geographies, programming areas and timeframes based on the best available evidence and analysis.

Using different methods for assessing climate risks at different points in the Program Cycle will likely be useful. For example, a design team may want to conduct climate risk screening at the project level and require implementing partners to conduct an activity-level risk assessment at the start of implementation. They might use an existing sector-scale climate change vulnerability analysis at the project level and then commission an external assessment to examine high/moderate risks as they are designing their activities. Or, they may want to use the climate screening tool twice, at both the project and activity levels, producing more detailed results as their understanding of both the climate risks and planned interventions evolves. Table 3 below summarizes the advantages and disadvantages of various methods that design teams may use to assess climate risks.

**Table 3: Pros and Cons of Climate Risk Assessment Methodologies**

Approach	Pros	Cons
USAID's Climate Screening Process	<ul style="list-style-type: none"> <li>● Flexible, can be done at a number of geographic scales (national, regional, local) considering available climate information.</li> <li>● If done in-house, can build capacity of design teams to understand and manage climate risks.</li> <li>● Relatively quick.</li> <li>● Inexpensive.</li> </ul>	<ul style="list-style-type: none"> <li>● Difficult to achieve sufficient understanding of climate risks for large, complicated projects that are likely to have high risks.</li> <li>● If done in-house, more human resource intensive.</li> <li>● Potential under-estimation of risks or bias towards justification of existing priorities.</li> </ul>
Tailored Analysis	<ul style="list-style-type: none"> <li>● Potential to be tailored to address areas of significant concern and most relevant to the project or activity under consideration.</li> <li>● A more nuanced understanding of significant climate risks may better inform programming.</li> <li>● Provides an independent, publicly available source of information for potential implementers to use in their proposal development and/or implementation.</li> <li>● Requires fewer human resources after procurement.</li> </ul>	<ul style="list-style-type: none"> <li>● Longer to procure and complete than in-house analysis.</li> <li>● More expensive.</li> <li>● Potential for less buy-in from USAID staff.</li> <li>● Fewer opportunities to build CRM capacity among USAID activity managers.</li> <li>● Requires strong understanding of what information is needed to shape the analysis.</li> </ul>
Existing Analysis	<ul style="list-style-type: none"> <li>● If appropriate analysis exists, it is quick and inexpensive.</li> </ul>	<ul style="list-style-type: none"> <li>● No ability to tailor to areas of concern for USAID programs.</li> <li>● Fewer opportunities to build CRM capacity among USAID activity managers.</li> </ul>

## 6. CRM AND MONITORING, EVALUATION AND LEARNING

Climate risk management and monitoring, evaluation and learning (MEL) are both processes that occur throughout the Program Cycle. Therefore, MEL can support CRM by providing information regarding assumptions, documenting progress, and facilitating adaptive management. Incorporating climate risk management in MEL fosters continuous improvement to strategies and actions aimed at addressing climate risks and building climate resilience. There are several options for how climate change can be incorporated into MEL. Here are a few illustrative examples:

### *Monitoring the climate context*

Scientific understanding around climate variability and change is generally improving over time, which means new information may become available during implementation about current weather and climate stressors facing USAID objectives as well as any assumptions related to current and future climate change. Therefore, it could be useful to monitor the climate context and assumptions around climate change to see if they remain valid. This might be done by formally monitoring specific context indicators related to climate risks, such as temperature or precipitation, as part of the PAD or Activity MEL Plan. Alternatively, the AOR/COR may occasionally review the literature around identified climate risks to consider their impact on objectives. Portfolio reviews provide a good opportunity to reflect on whether new climate information should trigger a re-evaluation of climate risks or adjustments of climate risk management measures. For example, an agriculture project may assume that while projections indicate higher temperatures, coffee will still be productive for the next 5-10 years. Monitoring climate context indicators like temperature can help ascertain that the assumption is valid. Similarly, an assumption that increased intensity and frequency of storms will not overwhelm the government's capacity to respond and thus lose legitimacy is one that could be revisited during a portfolio review.

### *Adjusting performance indicator targets based on current and expected climate change impacts and related actions*

If malaria incidence is expected to increase in the target population due to climate change, targets related to the number of people treated may need to increase, however, expectations regarding the health of the population may need to be lowered.

### *Documenting the benefits of taking action to reduce climate change impacts and/or increase adaptive capacity*

Performance monitoring will be especially important in cases of moderate to high risks because it will help determine if risk management efforts are successful and communicate how the Agency is contributing to climate resilience. Reporting on standard indicators helps USAID tell a larger story about its development efforts and also supports beneficiaries with reporting to the United Nations Framework Convention on Climate Change (UNFCCC) and other entities. While a design team may establish custom indicators, Global Climate Change (GCC) standard indicators are also available. The [GCC Standard Indicator Handbook](#) includes the Performance Indicator Reference

Sheets (PIRS) for each GCC Standard Indicator. The [GCC Summary Sheet](#) provides Missions and implementers with a quick reference for the Standard Indicators. For example, an agriculture activity that includes improved extension services related to climate change might report on the standard indicator, “number of people supported by the USG to adapt to the effects of climate change.”

#### *Avoiding unintended negative consequences*

During implementation, OUs should also document and monitor any potential adverse environmental and social impacts of the proposed actions to address climate risks. For example, in the case of a proposed road relocation due to storm surge risk, the new placement of that road might cause increased flooding, in turn causing economic and social hardship to surrounding communities. In this case, there should be monitoring for such unintended consequences and appropriate corrective actions taken.

#### *Incorporating climate risk management measures into the Environmental Mitigation and Monitoring Plan*

Using environmental compliance systems required under 22 CFR 216 can also strengthen performance monitoring of the implementation status of climate risk management measures. One option for addressing climate risks is to identify mitigation measures that the implementer should adopt. These should be incorporated in the Environmental Mitigation and Monitoring Plan (EMMP). The EMMP is used to record both the completion and effectiveness of mitigation measures.

### **Adaptive Management**

Adaptive management is an intentional way for USAID to make planning decisions and adjustments during implementation in response to new information or changes in context. If climate risks have a larger than anticipated impact or if understanding of the climate risks improves during the life of the project or activity, adaptive management should be employed. This could entail adjustments in design, reflecting the new reality in work plans, etc. Note that additional climate risk assessment may be required and would then follow a similar assessment process as outlined in this document.<sup>5</sup>

### **Monitoring for Agency Compliance**

To monitor compliance with the policy, USAID will use the following metrics:

- “An estimation of the proportion of each agency's direct international development programs and investments for which climate-risk assessments have been conducted.”
- “An estimation of the proportion of the programs and investments for which climate risk was identified and acted upon.”

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<sup>5</sup> An iterative climate risk management approach, such as the one described here, is supported by the Intergovernmental Panel on Climate Change (2014). Field, C.B. et al., 2014: Technical summary. In: Climate Change 2014: Impacts, Adaptation and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Field, C.B., et al. (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 35-94.

Furthermore, the responsibility for CRM and reporting in the case of agreements with other agencies or departments should rest with the agency receiving funds (receiving agency), unless alternate arrangements are made. Depending on the type of agreement made (632a or 632b agreement under the Foreign Assistance Act, in addition to other types of transfers); the fiduciary responsibility would help determine who should report on the dollars screened. If the fiduciary responsibility lies with USAID, the receiving agency must provide the CRM documentation to USAID, so that USAID may comply with reporting requirements. While this holds for the activity level, USAID's application of CRM at the strategy and project level should include consideration of the work it plans to do with other agencies.

## GLOSSARY

Activity	The mechanism through which an intervention or set of interventions is carried out, typically through an award such as a contract or grant, through a partnership such as with the host country government, or through action undertaken directly by USAID staff that contributes to a project, such as a policy dialogue.
Adaptive management	An intentional way for USAID to make planning decisions and adjustments during implementation in response to new information or changes in context.
Climate change	Variations as well as persistent change in climate over decades or longer.
Climate impact	The effect of climate variability or change on social or natural objects or systems. E.g., the impairment of a port facility by sea level rise, or the change in species habitat due to warmer temperatures.
Climate resilience	The ability to anticipate, prepare for, and adapt to changing conditions and withstand, respond to and recover rapidly from disruptions.
Climate risk	The potential for negative consequences due to changing climatic conditions. Climate risk consists of individual climate risks—potentially severe adverse consequences for development programs (or for humans and social-ecological systems) resulting from the interaction of climate-related hazards with the vulnerability of societies and systems exposed to climate change. For purposes of USAID’s climate risk management, risks are qualitatively categorized as high, moderate or low.
Climate risk analysis	An examination of the magnitude of the potential consequence(s) of climate change impact(s) and the likelihood that the consequence(s) will occur under prescribed scenarios of climate change. It is more in-depth than climate risk screening.
Climate risk assessment	A general term referring to the systematic process of evaluating the potential climate-related risks that may be involved in a strategy, project or activity. It includes both screening and analysis.
Climate risk management	The process of assessing, addressing and adaptively managing climate risk.

Climate risk screening	Broad consideration of current and future climate risks and opportunities early in the development decision-making process.
Climate scenario	A plausible and often simplified representation of the future climate. <sup>6</sup>
Climate stressor	A climate factor that can affect the functioning of a system. For example, rising temperatures and greater rainfall variability may affect agricultural productivity, with implications for food security. Climate stressors can also limit the potential success of development interventions.
Climate variability	Variations in climate (including the normal highs and lows, wet and dry periods, hot and cool periods and extreme values) and the reference to day-to-day variability, year-to-year variability and even decadal scale variability. The term “climate change” refers to those variations as well as persistent change in climate over decades or longer.
Opportunities	Potential to achieve multiple development objectives (such as climate adaptation, mitigation and/or other development objectives), to take advantage of recently adopted policies, changing attitudes or other “windows”, and/or to take advantage of new options posed by a changing climate.
Project	A set of complementary activities, over an established timeline and budget, intended to achieve a discrete development result, often aligned with an Intermediate Result (IR) in the CDCS Results Framework. Taken together, a Mission’s suite of project designs provides the operational plans for achieving the objectives in its CDCS or other applicable strategic plan. (ADS 201).
Vulnerability	Vulnerability to climate change is the “propensity or predisposition to be adversely affected” by climate stressors. It is a function of a system’s exposure, sensitivity, and adaptive capacity. The more exposed or sensitive a system is to climate change (or climate variability, including extreme events), the more vulnerable it will be. The greater the adaptive capacity of a system or society (e.g., the wealthier, better organized it is), in general, the less vulnerable it will be.

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<sup>6</sup> From IPCC (2014)