



ONE PLANET
CITY CHALLENGE

ASSESSMENT FRAMEWORK:

APPENDIX B


High Potential Adaptation
Actions Method (HPAAM)



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This appendix presents the technical foundation of the High Potential Adaptation Actions Method (HPAAM) used in the 2025 One Planet City Challenge (OPCC) Assessment Framework. It supports cities in identifying region-specific climate hazards and prioritizing adaptation actions accordingly. This document must be read alongside WWF’s OPCC Assessment Framework – Technical Document 2025.



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Top 5 Recommended Adaptation Actions by Region and Sub-Region (OPCC)¹

Africa Region: High-Impact Adaptation Actions

North Africa

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Community engagement/ education	Heat mapping and thermal imaging	Cooling centres, pools, water parks/plazas	Municipal services (including water and sanitation)	White roofs
Urban Flooding (including Sea Level Rise)	Flood mapping	Community engagement/ education	Hazard resistant infrastructure design and construction	Ecological restoration (including wetland and floodplain conservation and restoration)	Real time risk monitoring
Urban Water Scarcity and Security	Disaster planning and preparedness	Soil and water conservation	Ecological restoration (including wetland and floodplain conservation and restoration)	Watershed preservation	Building codes
Dynamic Interactions	Disease prevention measures	Landslide risk mapping	Biodiversity monitoring	Community engagement/ education	Real time risk monitoring

¹ The OPCC applies the IPCC Sixth Assessment Report (WGII, 2022) regional classification. While the IPCC considers Small Islands as a distinct category, the OPCC does not apply it in the HPAAM due to limited city-level data. Instead, these cities are guided by recommendations from the geographical region to which they are most comparable.

West Africa

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Community engagement/ education	Shading in public spaces	Transport and road infrastructure adaptation	Afforestation and reforestation	Green infrastructure
Urban Flooding (including Sea Level Rise)	Flood mapping	Improved drainage	Municipal services to reduce food waste (including composting)	Sea level rise modelling	Traditional technologies and methods
Urban Water Scarcity and Security	Conservation and replanting mangrove forest	Flood mapping	Ecological restoration (including wetland and floodplain conservation and restoration)	Soil and water conservation	Watershed preservation
Dynamic Interactions	Air quality initiatives	Disease prevention measures	Flood mapping	Land zoning laws (including restrict development in at risk areas)	Biodiversity monitoring

Central Africa

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Flood mapping	Heat mapping and thermal imaging	Cooling centres, pools, water parks/plazas	Municipal services (including water and sanitation)	White roofs
Urban Flooding (including Sea Level Rise)	Biodiversity monitoring	Hazard resistant infrastructure design and construction	Landslide risk mapping	Flood defence, such as flood levees and culverts	Improved drainage
Urban Water Scarcity and Security	Building codes	Afforestation and reforestation	Disaster planning and preparedness	Watershed preservation	Building codes
Dynamic Interactions	Real time risk monitoring	Community-based natural resource management	Community engagement/education	Disease prevention measures	Hazard resistant infrastructure design and construction

East Africa

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Community engagement/ education	Afforestation and reforestation	Improved drainage	Resilience and resistance measures for buildings	White roofs
Urban Flooding (including Sea Level Rise)	Flood mapping	Biodiversity monitoring	Real time risk monitoring	Community engagement/ education	Ecological restoration (including wetland and floodplain conservation and restoration)
Urban Water Scarcity and Security	Building standards	Green infrastructure	Renewable energy technologies	Watershed preservation	Building codes
Dynamic Interactions	Biodiversity monitoring	Disease prevention measures	Flood mapping	Community engagement/ education	Air quality initiatives

Southern Africa

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Heat mapping and thermal imaging	Community engagement/ education	Cooling centres, pools, water parks/plazas	Municipal services (including water and sanitation)	White roofs
Urban Flooding (including Sea Level Rise)	Flood mapping	Community engagement/ education	Hazard resistant infrastructure design and construction	Ecological restoration (including wetland and floodplain conservation and restoration)	Real time risk monitoring
Urban Water Scarcity and Security	Disaster planning and preparedness	Soil and water conservation	Community engagement/awareness campaigns on the climate and health benefits of sustainable healthy diets	Ecological restoration (including wetland and floodplain conservation and restoration)	Smart metering in households
Dynamic Interactions	Disease prevention measures	Landslide risk mapping	Community engagement/education	Real time risk monitoring	Bushfire reduction and prescribed fire

Asia Region: High-Impact Adaptation Actions

North Asia

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Disease prevention measures	Heat mapping and thermal imaging	Shading in public spaces	Resilience and resistance measures for buildings	Early warning and response systems
Urban Flooding (including Sea Level Rise)	Hazard resistant infrastructure design and construction	Hazard resistant infrastructure design and construction	Community engagement/education	Flood defence, such as flood levees and culverts	Improved drainage
Urban Water Scarcity and Security	Upgrading existing water supply infrastructure	Water recycling/reclamation	Community engagement/education	Ecological restoration (including wetland and floodplain conservation and restoration)	Water storage and pump storage
Dynamic Interactions	Real time risk monitoring	Landslide risk mapping	Community engagement/education	Real time risk monitoring	Essential public health services

East Asia

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Community engagement/education	Cool pavement	Shading in public spaces	Social safety nets and social protection	Early warning and response systems
Urban Flooding (including Sea Level Rise)	Flood mapping	Hazard resistant infrastructure design and construction	Community engagement/education	Real time risk monitoring	Flood defence, such as flood levees and culverts
Urban Water Scarcity and Security	Upgrading existing water supply infrastructure	Water recycling/reclamation	Water storage and pump storage	Conservation and replanting mangrove forest	Disease prevention measures
Dynamic Interactions	Disease prevention measures	Landslide risk mapping	Community engagement/education	Social safety nets and social protection	Ecological restoration (including wetland and floodplain conservation and restoration)

Southeast Asia

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Community engagement/education	Heat mapping and thermal imaging	Shading in public spaces	Afforestation and reforestation	Biodiversity monitoring
Urban Flooding (including Sea Level Rise)	Flood mapping	Community engagement/education	Flood defence, such as flood levees and culverts	Improved drainage	Hazard resistant infrastructure design and construction
Urban Water Scarcity and Security	Community engagement/education	Water storage and pump storage	Heat mapping and thermal imaging	Water efficiency regulations or standards	Water recycling/reclamation
Dynamic Interactions	Disease prevention measures	Landslide risk mapping	Community engagement/education	Essential public health services	Real time risk monitoring

South Asia

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Resilience and resistance measures for buildings	Afforestation and reforestation	Community engagement/education	Early warning and response systems	Soil retention strategies
Urban Flooding (including Sea Level Rise)	Flood mapping	Hazard resistant infrastructure design and construction	Improved drainage	Real time risk monitoring	Conservation and replanting mangrove forest
Urban Water Scarcity and Security	Ecological restoration (including wetland and floodplain conservation and restoration)	Municipal services (including water and sanitation)	Storm and wastewater management	Municipal water efficiency retrofits	Soil and water conservation
Dynamic Interactions	Disease prevention measures	Air quality initiatives	Landslide risk mapping	Municipal services (including water and sanitation)	Storm and wastewater management

West Asia

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Heat mapping and thermal imaging	Resilience and resistance measures for buildings	Community engagement/education	Renewable energy technologies	Sustainable forest management
Urban Flooding (including Sea Level Rise)	Flood mapping	Hazard resistant infrastructure design and construction	Flood defence, such as flood levees and culverts	Sea level rise modelling	Improved drainage
Urban Water Scarcity and Security	Ensure access to resilient secure, sustainable and safely managed sanitation services	Water recycling/reclamation	Community engagement/education	Ecological restoration (including wetland and floodplain conservation and restoration)	Water storage and pump storage
Dynamic Interactions	Disease prevention measures	Real time risk monitoring	Sea level rise modelling	Resilience and resistance measures for buildings	Afforestation and reforestation

Central and South America Region: High-Impact Adaptation Actions

Central America

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Heat mapping and thermal imaging	Community engagement/ education	Hazard resistant infrastructure design and construction	Air quality initiatives	Municipal services (including water and sanitation)
Urban Flooding (including Sea Level Rise)	Flood mapping	Community engagement/ education	Hazard resistant infrastructure design and construction	Real time risk monitoring	Ecological restoration (including wetland and floodplain conservation and restoration)
Urban Water Scarcity and Security	Soil retention strategies	Community engagement/ education	Municipal services (including water and sanitation)	Soil and water conservation	Biodiversity monitoring
Dynamic Interactions	Community engagement/ education	Landslide risk mapping	Air quality initiatives	Real time risk monitoring	Vaccination programs

Northwestern South America

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Community engagement/ education	Biodiversity monitoring	Community-based natural resource management	Ecological restoration (including wetland and floodplain conservation and restoration)	Green infrastructure
Urban Flooding (including Sea Level Rise)	Flood mapping	Community engagement/ education	Municipal services (including water and sanitation)	Improved drainage	Hazard resistant infrastructure design and construction
Urban Water Scarcity and Security	Community engagement/ education	Afforestation and reforestation	Water recycling/reclamation	Hazard resistant infrastructure design and construction	Municipal services (including water and sanitation)
Dynamic Interactions	Landslide risk mapping	Community engagement/ education	Hazard resistant infrastructure design and construction	Watershed preservation	Air quality initiatives

Northern South America

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Green infrastructure	Heat mapping and thermal imaging	Soil retention strategies	Disease prevention measures	Land zoning laws (including restrict development in at risk areas)
Urban Flooding (including Sea Level Rise)	Ecological restoration (including wetland and floodplain conservation and restoration)	Flood mapping	Community engagement/education	Soil retention strategies	Hazard resistant infrastructure design and construction

Urban Water Scarcity and Security	Municipal services (including water and sanitation)	Building codes	Community engagement/education	Flood defence, such as flood levees and culverts	Water saving technologies (including rainwater harvesting)
Dynamic Interactions	Community engagement/education	Real time risk monitoring	Landslide risk mapping	Biodiversity monitoring	Disease prevention measures

Northeastern South America

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Green infrastructure	Heat mapping and thermal imaging	Shading in public spaces	Air quality initiatives	Hazard resistant infrastructure design and construction
Urban Flooding (including Sea Level Rise)	Flood mapping	Improved drainage	Soil retention strategies	Flood defence, such as flood levees and culverts	Real time risk monitoring
Urban Water Scarcity and Security	Community engagement/education	Biodiversity monitoring	Community-based natural resource management	Flood defence, such as flood levees and culverts	Hazard resistant infrastructure design and construction
Dynamic Interactions	Landslide risk mapping	Disease prevention measures	Community engagement/education	Hazard resistant infrastructure design and construction	Real time risk monitoring

South America Monsoon

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Smart metering in households	Bushfire reduction and prescribed fire	Resilience and resistance measures for buildings	Green infrastructure	Cool pavement
Urban Flooding (including Sea Level Rise)	Flood mapping	Air quality initiatives	Disease prevention measures	Flood defence, such as flood levees and culverts	Improved drainage
Urban Water Scarcity and Security	Adaptive management	Water storage and pump storage	Biodiversity monitoring	Water saving technologies (including rainwater harvesting)	Municipal services (including water and sanitation)
Dynamic Interactions	Air quality initiatives	Community engagement/education	Heat mapping and thermal imaging	Ecological restoration (including wetland and floodplain conservation and restoration)	Real time risk monitoring

Southwestern South America

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Heat mapping and thermal imaging	Afforestation and reforestation	Community engagement/education	Shading in public spaces	Upgrading existing water supply infrastructure
Urban Flooding (including Sea Level Rise)	Flood mapping	Flood defence, such as flood levees and culverts	Biodiversity monitoring	Hazard resistant infrastructure design and construction	Real time risk monitoring

Urban Water Scarcity and Security	Community engagement/ education	Water saving technologies (including rainwater harvesting)	Water efficiency regulations or standards	Development of targeted plan/program to address hazard(s) selected	Public preparedness (including exercises/drills)
Dynamic Interactions	Essential public health services	Community engagement/ education	Social safety nets and social protection	Biodiversity monitoring	Municipal services (including water and sanitation)

Southeastern South America

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Community engagement/ education	Heat mapping and thermal imaging	Biodiversity monitoring	Green infrastructure	Upgrading existing water supply infrastructure
Urban Flooding (including Sea Level Rise)	Hazard resistant infrastructure design and construction	Flood mapping	Real time risk monitoring	Flood defence, such as flood levees and culverts	Community engagement/ education
Urban Water Scarcity and Security	Community engagement/ education	Water saving technologies (including rainwater harvesting)	Upgrading existing water supply infrastructure	Ecological restoration (including wetland and floodplain conservation and restoration)	Biodiversity monitoring
Dynamic Interactions	Disease prevention measures	Community engagement/ education	Real time risk monitoring	Landslide risk mapping	Community engagement/ awareness campaigns on the climate and health benefits of sustainable healthy diets

Southern South America

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Soil retention strategies	Hazard resistant infrastructure design and construction	Resilience and resistance measures for buildings	Green infrastructure	Cool pavement
Urban Flooding (including Sea Level Rise)	Community engagement/ education	Diversifying water supply (including new sources)	Green infrastructure	Soil retention strategies	Sea level rise modelling
Urban Water Scarcity and Security	Community engagement/ education	Water storage and pump storage	Biodiversity monitoring	Water saving technologies (including rainwater harvesting)	Municipal services (including water and sanitation)
Dynamic Interactions	Hazard resistant infrastructure design and construction	Soil retention strategies	Landslide risk mapping	Hazard resistant infrastructure design and construction	Disease prevention measures

Europe Region: High-Impact Adaptation Actions

Northern Europe

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Heat mapping and thermal imaging	Community engagement/ education	Resilience and resistance measures for buildings	Afforestation and reforestation	Green infrastructure
Urban Flooding (including Sea Level Rise)	Flood mapping	Flood defence, such as flood levees and culverts	Community engagement/education	Sea level rise modelling	Hazard resistant infrastructure design and construction
Urban Water Scarcity and Security	Community engagement/ education	Disaster planning and preparedness	Upgrading existing water supply infrastructure	Water efficiency regulations or standards	Water saving technologies (including rainwater harvesting)
Dynamic Interactions	Landslide risk mapping	Increasing biological diversity	Real time risk monitoring	Hazard resistant infrastructure design and construction	Resilience and resistance measures for buildings

Western and Central Europe

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Heat mapping and thermal imaging	Community engagement/ education	Real time risk monitoring	Shading in public spaces	Building standards
Urban Flooding (including Sea Level Rise)	Flood mapping	Soil retention strategies	Sea level rise modelling	Water storage and pump storage	Flood defence, such as flood levees and culverts
Urban Water Scarcity and Security	Diversifying water supply (including new sources)	Biodiversity monitoring	Community engagement/education	Financial incentives (including taxes and subsidies)	Municipal/ jurisdictional food procurement policies that support sustainable food production practices (including school procurement, etc.)
Dynamic Interactions	Biodiversity monitoring	Community engagement/ education	Disease prevention measures	Early warning and response systems	Hazard resistant infrastructure design and construction

Southern Europe

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Heat mapping and thermal imaging	Community engagement/ education	Resilience and resistance measures for buildings	Green infrastructure	Cool pavement
Urban Flooding (including Sea Level Rise)	Flood mapping	Hazard resistant infrastructure design and construction	Flood defence, such as flood levees and culverts	Real time risk monitoring	Community engagement/ education
Urban Water Scarcity and Security	Water storage and pump storage	Community engagement/ education	Biodiversity monitoring	Water recycling/reclamation	Municipal services (including water and sanitation)

Dynamic Interactions	Biodiversity monitoring	Community engagement/ education	Landslide risk mapping	Air quality initiatives	Disease prevention measures
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Eastern Europe

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Community engagement/ education	Heat mapping and thermal imaging	Biodiversity monitoring	Green infrastructure	Upgrading existing water supply infrastructure
Urban Flooding (including Sea Level Rise)	Flood mapping	Hazard resistant infrastructure design and construction	Community engagement/education	Real time risk monitoring	Flood defence, such as flood levees and culverts
Urban Water Scarcity and Security	Community engagement/ education	Water saving technologies (including rainwater harvesting)	Ecological restoration (including wetland and floodplain conservation and restoration)	Municipal services (including water and sanitation)	Upgrading existing water supply infrastructure
Dynamic Interactions	Community engagement/ education	Disease prevention measures	Landslide risk mapping	Real time risk monitoring	Hazard resistant infrastructure design and construction

North America Region: High-Impact Adaptation Actions

Canada British Columbia

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Resilience and resistance measures for buildings	Heat mapping and thermal imaging	Community engagement/education	Afforestation and reforestation	Green infrastructure
Urban Flooding (including Sea Level Rise)	Sea level rise modelling	Flood mapping	Hazard resistant infrastructure design and construction	Land zoning laws (including restrict development in at risk areas)	Building codes
Urban Water Scarcity and Security	Community engagement/education	Development of targeted plan/program to address hazard(s) selected	Biodiversity monitoring	Flood mapping	Water use restrictions
Dynamic Interactions	Community engagement/education	Air quality initiatives	Disease prevention measures	Bushfire reduction and prescribed fire	Land zoning laws (including restrict development in at risk areas)

Canada Ontario

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Heat mapping and thermal imaging	Community engagement/education	Biodiversity monitoring	Cooling centres, pools, water parks/plazas	Air quality initiatives
Urban Flooding (including Sea Level Rise)	Flood mapping	Flood defence, such as flood levees and culverts	Hazard resistant infrastructure design and construction	Community engagement/education	Resilience and resistance measures for buildings
Urban Water Scarcity and Security	Development of targeted plan/program to address hazard(s) selected	Community engagement/awareness campaigns on the climate and health benefits of sustainable healthy diets	Municipal services (including water and sanitation)	Water storage and pump storage	Essential public health services
Dynamic Interactions	Community engagement/education	Resilience and resistance measures for buildings	Development of targeted plan/program to address hazard(s) selected	Disease prevention measures	Public preparedness (including exercises/drills)

Canada Prairies

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Real time risk monitoring	Social safety nets and social protection	Development of targeted plan/program to address hazard(s) selected	Heat mapping and thermal imaging	Cooling centres, pools, water parks/plazas
Urban Flooding (including Sea Level Rise)	Real time risk monitoring	Flood mapping	Hazard resistant infrastructure design and construction	Ensure access to resilient secure, sustainable and safely managed sanitation services	Municipal services (including water and sanitation)
Urban Water Scarcity and Security	Municipal services (including water and sanitation)	Community engagement/ education	Municipal services to reduce food waste (including composting)	Community engagement/ education	Water storage and pump storage
Dynamic Interactions	Real time risk monitoring	Community engagement/ education	Hazard resistant infrastructure design and construction	Biodiversity monitoring	Disease prevention measures

Canada Québec

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Heat mapping and thermal imaging	Community engagement/ education	Resilience and resistance measures for buildings	Biodiversity monitoring	Cooling centres, pools, water parks/plazas
Urban Flooding (including Sea Level Rise)	Development of targeted plan/program to address hazard(s) selected	Storm and wastewater management	Flood defence, such as flood levees and culverts	Sea level rise modelling	Sewage works
Urban Water Scarcity and Security	Municipal services (including water and sanitation)	Development of targeted plan/program to address hazard(s) selected	Community engagement/awareness campaigns on the climate and health benefits of sustainable healthy diets	Community engagement/ education	Water storage and pump storage
Dynamic Interactions	Increasing biological diversity	Real time risk monitoring	Disease prevention measures	Resilience and resistance measures for buildings	Development of targeted plan/program to address hazard(s) selected

Canada Atlantic

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Heat mapping and thermal imaging	Community engagement/ education	Resilience and resistance measures for buildings	Biodiversity monitoring	Cooling centres, pools, water parks/plazas
Urban Flooding (including Sea Level Rise)	Hazard resistant infrastructure design and construction	Sewage works	Sea walls and coastal protection structures	Storm and wastewater management	Sewage works
Urban Water Scarcity and Security	Municipal services (including water and sanitation)	Development of targeted plan/program to address hazard(s) selected	Community engagement/awareness campaigns on the climate and health benefits of sustainable healthy diets	Community engagement/ education	Water storage and pump storage

Dynamic Interactions	Community engagement/ education	Real time risk monitoring	Disease prevention measures	Resilience and resistance measures for buildings	Development of targeted plan/program to address hazard(s) selected
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US Southeast

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Air quality initiatives	Heat mapping and thermal imaging	Community engagement/education	Resilience and resistance measures for buildings	White roofs
Urban Flooding (including Sea Level Rise)	Flood mapping	Community engagement/ education	Sea level rise modelling	Hazard resistant infrastructure design and construction	Resilience and resistance measures for buildings
Urban Water Scarcity and Security	Water saving technologies (including rainwater harvesting)	Community engagement/ education	Soil and water conservation	Water recycling/reclamation	Community engagement/ awareness campaigns on the climate and health benefits of sustainable healthy diets
Dynamic Interactions	Community engagement/ education	Hazard resistant infrastructure design and construction	Municipal services (including water and sanitation)	Resilience and resistance measures for buildings	Air quality initiatives

US Southern Great Plains

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Heat mapping and thermal imaging	Community engagement/ education	Cooling centres, pools, water parks/plazas	Afforestation and reforestation	Cool pavement
Urban Flooding (including Sea Level Rise)	Community engagement/ education	Resilience and resistance measures for buildings	Flood mapping	Hazard resistant infrastructure design and construction	Disaster planning and preparedness
Urban Water Scarcity and Security	Community engagement/ education	Development of targeted plan/program to address hazard(s) selected	Community-based adaptation	Water saving technologies (including rainwater harvesting)	Diversifying water supply (including new sources)
Dynamic Interactions	Community engagement/ education	Disease prevention measures	Disaster planning and preparedness	Social safety nets and social protection	Air quality initiatives

US Northeast

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Heat mapping and thermal imaging	Essential public health services	White roofs	Cooling centres, pools, water parks/plazas	Afforestation and reforestation
Urban Flooding (including Sea Level Rise)	Flood mapping	Community engagement/ education	Hazard resistant infrastructure design and construction	Sea level rise modelling	Resilience and resistance measures for buildings

Urban Water Scarcity and Security	Community engagement/ education	Soil and water conservation	Water saving technologies (including rainwater harvesting)	Hazard resistant infrastructure design and construction	Community-based adaptation
Dynamic Interactions	Disease prevention measures	Landslide risk mapping	Transport and road infrastructure adaptation	Biodiversity monitoring	Economic diversification measures

US Midwest

Hazard	Priority 1	Priority 2	Priority 3	Priority 4	Priority 5
Temperature and the Urban Heat Island	Community engagement/ education	Heat mapping and thermal imaging	Air quality initiatives	Development of targeted plan/program to address hazard(s) selected	Increase resilience of and/or diversify power/energy supply
Urban Flooding (including Sea Level Rise)	Flood mapping	Community engagement/ education	Hazard resistant infrastructure design and construction	Storm and wastewater management	Flood defence, such as flood levees and culverts
Urban Water Scarcity and Security	Community engagement/ education	Soil and water conservation	Heat mapping and thermal imaging	Municipal services (including water and sanitation)	Water efficiency regulations or standards
Dynamic Interactions	Community engagement/ education	Resilience and resistance measures for buildings	Disease prevention measures	Disaster planning and preparedness	Hazard resistant infrastructure design and construction

US Southwest

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Heat mapping and thermal imaging	Community engagement/ education	Resilience and resistance measures for buildings	White roofs	Afforestation and reforestation
Urban Flooding (including Sea Level Rise)	Flood mapping	Hazard resistant infrastructure design and construction	Sea level rise modelling	Community engagement/ education	Flood defence, such as flood levees and culverts
Urban Water Scarcity and Security	Community engagement/ education	Soil and water conservation	Community-based adaptation	Municipal services (including water and sanitation)	Development of targeted plan/program to address hazard(s) selected
Dynamic Interactions	Community engagement/ education	Resilience and resistance measures for buildings	Bushfire reduction and prescribed fire	Air quality initiatives	Real time risk monitoring

US Northwest

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Heat mapping and thermal imaging	Shading in public spaces	Social safety nets and social protection	Essential public health services	Air quality initiatives
Urban Flooding (including Sea Level Rise)	Flood mapping	Hazard resistant infrastructure design and construction	Sea level rise modelling	Resilience and resistance measures for buildings	Storm and wastewater management

Urban Water Scarcity and Security	Community engagement/ education	Soil and water conservation	Municipal water efficiency retrofits	Sewage works	Upgrading existing water supply infrastructure
Dynamic Interactions	Community engagement/ education	Resilience and resistance measures for buildings	Hazard resistant infrastructure design and construction	Development of targeted plan/program to address hazard(s) selected	Landslide risk mapping

US Hawaii

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Cool pavement	Public preparedness (including exercises/drills)	Air quality initiatives	Resilience and resistance measures for buildings	Cooling centres, pools, water parks/plazas
Urban Flooding (including Sea Level Rise)	Hazard resistant infrastructure design and construction	Resilience and resistance measures for buildings	Flood mapping	Land zoning laws (including restrict development in at risk areas)	Landslide risk mapping
Urban Water Scarcity and Security	Hazard resistant infrastructure design and construction	Biodiversity monitoring	Water efficiency regulations or standards	Financial incentives (including taxes and subsidies)	Public preparedness (including exercises/drills)
Dynamic Interactions	Landslide risk mapping	Resilience and resistance measures for buildings	Disease prevention measures	Hazard resistant infrastructure design and construction	Disaster planning and preparedness

US Northern Great Plains

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Development of targeted plan/program to address hazard(s) selected	Community engagement/ education	Air quality initiatives	Resilience and resistance measures for buildings	Cooling centres, pools, water parks/plazas
Urban Flooding (including Sea Level Rise)	Land zoning laws (including restrict development in at risk areas)	Hazard resistant infrastructure design and construction	Community engagement/education	Sea level rise modelling	Resilience and resistance measures for buildings
Urban Water Scarcity and Security	Diversifying water supply (including new sources)	Soil and water conservation	Water saving technologies (including rainwater harvesting)	Hazard resistant infrastructure design and construction	Community-based adaptation
Dynamic Interactions	Biodiversity monitoring	Community engagement/ education	Disease prevention measures	Hazard resistant infrastructure design and construction	Disaster planning and preparedness

US Arctic

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Heat mapping and thermal imaging	Community engagement/ education	Air quality initiatives	Resilience and resistance measures for buildings	Cooling centres, pools, water parks/plazas
Urban Flooding (including Sea Level Rise)	Flood mapping	Hazard resistant infrastructure design and construction	Community engagement/education	Sea level rise modelling	Resilience and resistance measures for buildings

Urban Water Scarcity and Security	Community engagement/ education	Soil and water conservation	Water saving technologies (including rainwater harvesting)	Hazard resistant infrastructure design and construction	Community-based adaptation
Dynamic Interactions	Community engagement/ education	Resilience and resistance measures for buildings	Disease prevention measures	Hazard resistant infrastructure design and construction	Disaster planning and preparedness

Mexico Centre

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Community engagement/ education	Hazard resistant infrastructure design and construction	Heat mapping and thermal imaging	Ecological restoration (including wetland and floodplain conservation and restoration)	Community-based adaptation
Urban Flooding (including Sea Level Rise)	Flood mapping	Real time risk monitoring	Traditional technologies and methods	Community engagement/ education	Municipal services (including water and sanitation)
Urban Water Scarcity and Security	Afforestation and reforestation	Water saving technologies (including rainwater harvesting)	Community engagement/education	Municipal services (including water and sanitation)	Heat mapping and thermal imaging
Dynamic Interactions	Hazard resistant infrastructure design and construction	Air quality initiatives	Ex situ conservation and seed banks	Increasing biological diversity	Afforestation and reforestation

Mexico Southwest

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Community engagement/ education	White roofs	Afforestation and reforestation	Ecological restoration (including wetland and floodplain conservation and restoration)	Community-based adaptation
Urban Flooding (including Sea Level Rise)	Ecological restoration (including wetland and floodplain conservation and restoration)	Flood mapping	Real time risk monitoring	Storm and wastewater management	Air quality initiatives
Urban Water Scarcity and Security	Municipal services (including water and sanitation)	Community engagement/ education	Afforestation and reforestation	Water saving technologies (including rainwater harvesting)	Heat mapping and thermal imaging
Dynamic Interactions	Disease prevention measures	Air quality initiatives	Hazard resistant infrastructure design and construction	Community engagement/ education	Increasing biological diversity

Mexico Northeast

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Community engagement/ education	Afforestation and reforestation	Heat mapping and thermal imaging	Development of targeted plan/program to address hazard(s) selected	Disease prevention measures

Urban Flooding (including Sea Level Rise)	Flood mapping	Real time risk monitoring	Ecological restoration (including wetland and floodplain conservation and restoration)	Traditional technologies and methods	Air quality initiatives
Urban Water Scarcity and Security	Municipal services (including water and sanitation)	Water storage and pump storage	Afforestation and reforestation	Water saving technologies (including rainwater harvesting)	Heat mapping and thermal imaging
Dynamic Interactions	Real time risk monitoring	Biodiversity monitoring	Hazard resistant infrastructure design and construction	Community engagement/ education	Increasing biological diversity

Mexico Northwest

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Heat mapping and thermal imaging	Ecological restoration (including wetland and floodplain conservation and restoration)	Community engagement/education	Community-based adaptation	Transport and road infrastructure adaptation
Urban Flooding (including Sea Level Rise)	Flood mapping	Ecological restoration (including wetland and floodplain conservation and restoration)	Air quality initiatives	Soil retention strategies	Development of targeted plan/program to address hazard(s) selected
Urban Water Scarcity and Security	Community engagement/ education	Municipal services (including water and sanitation)	Biodiversity monitoring	Ecological restoration (including wetland and floodplain conservation and restoration)	Ensure access to resilient secure, sustainable and safely managed sanitation services
Dynamic Interactions	Landslide risk mapping	Community engagement/ education	Economic diversification measures	Air quality initiatives	Development of targeted plan/program to address hazard(s) selected

Mexico North

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Afforestation and reforestation	Heat mapping and thermal imaging	Afforestation and reforestation	Ecological restoration (including wetland and floodplain conservation and restoration)	Community-based adaptation
Urban Flooding (including Sea Level Rise)	Flood mapping	Green infrastructure	Landslide risk mapping	Real time risk monitoring	Air quality initiatives
Urban Water Scarcity and Security	Municipal services (including water and sanitation)	Community engagement/ education	Flood mapping	Storm and wastewater management	Heat mapping and thermal imaging
Dynamic Interactions	Air quality initiatives	Disease prevention measures	Essential public health services	Landslide risk mapping	Measuring days with extreme air pollution due to climate events

Mexico Southeast

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Building codes	Community engagement/ education	Heat mapping and thermal imaging	Ecological restoration (including wetland and floodplain conservation and restoration)	Community-based adaptation
Urban Flooding (including Sea Level Rise)	Flood and cyclone shelters	Hazard resistant infrastructure design and construction	Managed retreat/planned relocation	Real time risk monitoring	Resilience and resistance measures for buildings
Urban Water Scarcity and Security	Municipal services (including water and sanitation)	Community engagement/ education	Afforestation and reforestation	Water saving technologies (including rainwater harvesting)	Heat mapping and thermal imaging
Dynamic Interactions	Increasing biological diversity	Afforestation and reforestation	Air quality initiatives	Community engagement/awareness campaigns on the climate and health benefits of sustainable healthy diets	Food donation and redistribution of food surplus

Mexico Veracruz

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Community engagement/ education	Heat mapping and thermal imaging	Afforestation and reforestation	Ecological restoration (including wetland and floodplain conservation and restoration)	Community-based adaptation
Urban Flooding (including Sea Level Rise)	Hazard resistant infrastructure design and construction	Real time risk monitoring	Ecological restoration (including wetland and floodplain conservation and restoration)	Traditional technologies and methods	Air quality initiatives
Urban Water Scarcity and Security	Municipal services (including water and sanitation)	Community engagement/ education	Afforestation and reforestation	Water saving technologies (including rainwater harvesting)	Heat mapping and thermal imaging
Dynamic Interactions	Air quality initiatives	Landslide risk mapping	Hazard resistant infrastructure design and construction	Community engagement/ education	Increasing biological diversity

Australasia Region: High-Impact Adaptation Actions

Oceania

HAZARD	PRIORITY 1	PRIORITY 2	PRIORITY 3	PRIORITY 4	PRIORITY 5
Temperature and the Urban Heat Island	Heat mapping and thermal imaging	Community engagement/ education	Resilience and resistance measures for buildings	Cooling centres, pools, water parks/plazas	Afforestation and reforestation
Urban Flooding (including Sea Level Rise)	Flood mapping	Sea level rise modelling	Community engagement/education	Flood defence, such as flood levees and culverts	Hazard resistant infrastructure design and construction
Urban Water Scarcity and Security	Diversifying water supply (including new sources)	Municipal services (including water and sanitation)	Water saving technologies (including rainwater harvesting)	Water storage and pump storage	Building codes
Dynamic Interactions	Community engagement/ education	Landslide risk mapping	Real time risk monitoring	Disaster planning and preparedness	Bushfire reduction and prescribed fire



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1196 Gland, Switzerland. Tel. +41 22 364 9111. Fax. +41 22 364 0332.

For contact details and further information, please visit our international
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