Key Messages

Climate & Water, Sanitation and Hygiene

INTRODUCTION

The link between climate change resilience and access to water: It's basic.

It seems self-evident to say that we cannot build resilience to climate change, without ensuring resilient access to clean water, including for the most basic of human needs such as drinking, sanitation and hygiene Universal access to water for personal and domestic use is not just a fundamental human right. It is also a foundational necessity for human health, education, socio-economic development, and quality of life.

And we already know that climate change and water are inextricably linked.

One of the most immediate and obvious impacts of climate change is the one it is having on the water cycle through increasing droughts, floods, melting ice and rising sea-levels. It also increases the frequency and intensity of extreme weather events that destroy water and sanitation infrastructure and reduces the predictability of water availability for a variety of important uses.

In addition:

- Water, sanitation and hygiene services, the users, and the systems and water resources they depend on, are heavily impacted by climate change. People with poor quality WATER, SANITATION AND HYGIENE services are already some of the most vulnerable groups in society – climate change only compounds that vulnerability by further compromising these already poor services.
- Inadequate access to water, sanitation and hygiene is responsible for as much as 10% of the global disease burden, contributing to 1.6 million preventable deaths each year, including 60% of all diarrhoeal deaths. This reality is already, and will continue to be, exacerbated by climate change unless decisive action is taken. Ready access to clean, reliable water sources for drinking, sanitation and hygiene is essential for achieving integrated water resource management, and a fundamental or "basic" human right, to which all people are entitled without discrimination
- Rising temperatures increase water demand and scarcity, adversely impacting both affordability and quality, especially when water-borne sanitation systems are compromised by extreme weather events, or simply do not exist.
- Long-term drying of some climate sensitive regions necessitates drilling ever deeper bore holes and wells to access declining aquifers. This increases infrastructure and pumping costs, lowers the water table which takes time to replenish, impacts water quality and compounds the drying effect on surrounding lakes, streams and rivers.

- Water scarcity resulting in insufficient water for drinking, sanitation and small livelihoods is a driver of crisis and ultimately conflict, compromising peace and security as we have already seen in numerous countries and even entire regions such as MENA.
- When there are floods, human waste spreads and contaminates water sources used for drinking, immediately leading to a higher incidence of infectious diseases, childhood mortality and contributing to delayed child development.
- A 2017 UNICEF study estimated that more than 270 million children currently live in extremely flood-prone areas in countries where less than half the population has access to adequate sanitation facilities – and this number only covers children.
- The lives of women and girls will be especially impacted, as they are generally responsible for water management, sanitation and hygiene in the family and housing. Due to climate change, women and girls around the world turn to safe water sources farther and farther from their homes, collectively wasting more than 200 million hours every day on this task.
- A lack of basic access to water and sanitation is the harsh reality of life for many of the world's most vulnerable communities. It is already having devastating impacts on their health, wellbeing, and socio-economic development – and these impacts will only be made worse by climate change.

Climate change and access to water, sanitation and hygiene, are therefore inextricably linked. You can't address one, without addressing the other.

In short, you can't build community resilience to climate change without ensuring resilient access to water, including for the most basic of needs – drinking, sanitation and hygiene.

It is a vicious cycle: communities have insufficient access to water, sanitation and hygiene slow onset and extreme weather events aggravate these conditions, service provision becomes technically more expensive and more complex, access difficulties increase, and communities find themselves unable to break the cycle.

So how do we break the cycle?

Message One

You can't fix what you don't prioritise.

Despite the incontrovertible links between climate change and access to water, including for the most basic of human needs, our experience shows that these links are all-too-often being overlooked by key policy and decision-makers.

However, this is not because of a lack of care, attention, or diligence, but because of the complexities of human nature and the complex, multifaceted nature of climate change itself.

Under "business as usual", those with responsibility for ensuring community access to water, sanitation and hygiene, tend to be more focused on the provision of services, and focused less on broader water management issues. In addition, there has been a lack of adequate climate risk assessments to inform

the design and functioning of climate resilient water, sanitation and hygiene services. For these Line water, sanitation and hygiene Ministries, their priorities are perceived as more immediate and inherently more human in scale. *In short, if your chief priorities are foundational human and community needs and the delivery of basic services, it is easy to underestimate the long-term impacts and risks of climate change.*

Additionally, those with responsibility for tackling climate change tend to be more focused on large-scale resource management, prioritised (with regard to water), around building long-term resilience into key infrastructure, resources and hydrological systems. Water, sanitation and hygiene issues are often seen as just one part – however important – of a broader remit. *In short, if your chief priority is the climate resilience of water resources, it is easy to overlook community access and adaptation needs, including the adaptation needs of water services which clearly contribute to building community resilience.*

Climate change provides renewed impetus to address these longstanding challenges and provide truly resilient and sustainable water, sanitation and hygiene services.

Under "business as usual", these two key groups of policy and decision-makers, as well as advocates working in the water sector, each have their own problems and priorities that rightfully demand attention and resources.

Their respective challenges are great, and intersect in many ways, but they tend to operate separately, making it difficult to see where their core interests overlap and are either mutually reinforcing or limiting.

But the days of "business as usual" are over.

The world is waking up to our climate reality, which is fiendishly complex, dynamic, rapidly changing and uncertain, and its impacts are compounding rapidly. It is equal parts systemic and human, and those parts are inherently interdependent, with each impacting and being affected by the other.

We can't build resilience to the growing impacts of climate change unless we join forces and work together

Climate change impacts can't be averted if we work a non-systemic, fragmented way. We can't build climate resilient resources, systems and infrastructure that neglect the human need for resilient services for water, sanitation and hygiene. And we can't build community resilience to climate change without future proofing, adapting and safely managing our water systems, resources and infrastructure.

Key points:

- Ensuring universal access to water and sanitation by 2030, which 193 governments committed to in 2015 when they approved the Sustainable Development Goals (SDGs), will only be achievable with effective climate action and vice versa. The SDGs are, by design, indivisible and mutually reinforcing. Each of the 17 goals are impacted by – and have an impact on – all others. This is especially evident in the links between Goal 13 (Climate Action) and Goal 6 (Water and Sanitation).
- So far, most attention and investment in climate action has been – rightly – directed towards the mitigation of GHG emissions. But the climate crisis is escalating. Its impacts are already being felt – in some cases a decade (or more) earlier than anticipated, with many unprecedented and irreversible changes already occurring. **This has created an urgent need to elevate adaptation onto an equal footing with efforts to reduce emissions, necessitating rapid acceleration and increased investment in adaptation, including for building climate resilient water, sanitation and hygiene.**

- *Building climate resilient water resources and services requires investment and financing, and financing is determined by priorities set by governments. If policy and decision-makers don't prioritise water and sanitation, as part of overall water resource management, within their climate adaptation plans and commitments, unsustainable water, sanitation and hygiene services will persist, with severe implications for the health and survival of communities, who are also the hardest hit by climate change.*
- **Climate resilient water, sanitation and hygiene is a potential solution not only for adaptation, but also for mitigation of GHGs emissions.** There are unrealised opportunities for decarbonisation and low-emission energy generation in the water sector that can be achieved, in part, by building more climate resilient water, sanitation and hygiene infrastructure and services. (See Message 4)

Climate change is both a threat to water, sanitation and hygiene **and an opportunity to rethink and do** water, sanitation and hygiene **service provision differently for more sustainable outcomes.**

So how do we advance beyond "business as usual" and move forward together?

How do we help everyone understand how their priorities intersect and how they can be both mutually enabling and mutually beneficial?

Message two

Inter-sectoral cooperation and policy alignment between water, sanitation and hygiene, water resource management, and climate action is critical for building climate resilience

Those working to ensure the climate resilience of water resources, infrastructure and services need to align, coordinate and integrate their plans, policies and projects, including with respect to basic services. This is the only way to ensure that community access to water and sanitation will be properly prioritised and funded.

Because of the fundamental importance of ensuring resilient community access to water, failure to integrate water, sanitation and hygiene resilience into climate adaptation planning puts at risk the ultimate objective of climate action – protecting our planet, and all the people who inhabit it.

But whilst national policies for climate action and for the provision of water, sanitation and hygiene related services need to be aligned and integrated, with just a few notable exceptions, this has not been happening.

By mid-2020, whilst 9% of NDCs related to water resource management, only 2% of them were related to sanitation and just 3% to wastewater. Conversely, national water, sanitation and hygiene-specific policies and programs often fail to take account of future climate impacts and risks.

If NDCs don't account for water, sanitation and hygiene, then it is easy for water, sanitation and hygiene issues to fall off the climate policy radar. And if water, sanitation and hygiene policies don't take account of climate risks, they can't build resilience to future climate impacts. The result is a lack of policy alignment and integration which compromises the aims and outcomes of both.

This in turn diminishes recognition of water, sanitation and hygiene as a key solution for climate adaptation and mitigation, leading to increased climate risk blind spots, opportunities being lost, and investment inevitably being wasted on projects that are not resilient to extreme weather events.

This lack of alignment and wasted resources is not only unsustainable in the long run, but it becomes a self-perpetuating systemic failure, breeding a perception of water, sanitation and hygiene as a risky investment – both for traditional development funding and for climate finance too.

There is an urgent need for countries to undertake robust risk assessments of future climate impacts on their water, sanitation and hygiene infrastructure and services, to ensure that both long-term benefits and return on investment are achieved.

Message three

Mitigation opportunities in water, sanitation and hygiene are a crucial component of climate action

Whilst GHG emissions from the water, sanitation and hygiene sector represent a small contribution to global CO2 levels compared to sectors like energy, transport, manufacturing, construction and agriculture, the emission reduction opportunities in water, sanitation and hygiene are critical for ensuring a low-emission, climate resilient future for all.

Moreover, according to the IPCC, "the relationship between climate change mitigation measures and water is a reciprocal one".

Measures introduced to reduce GHG emissions have direct implications for water, sanitation and hygiene. conversely, wastewater and sanitation systems have an impact on carbon emissions due to the energy intensity of water treatment and distribution systems.

In addition:

- The role that governments and other actors, including the private sector, must play in water stewardship to achieve a sustainable, low-carbon future is acknowledged in SDGs and NDCs. However, this awareness is still incomplete.
- Few institutions and actors responsible for updating and implementing naps, ndcs and national climate change strategies have fully taken water, sanitation and hygiene-related mitigation issues into account.
- The use of wastewater can be a cost-efficient and sustainable source of energy, nutrients, organic matter and other useful by-products.

- Biogas from the wastewater treatment process can be captured and contribute to carbon-neutral treatment. Also, given the temperature of wastewater, heat pumps can be installed in sewer pipes to produce energy.
- Biofuel production can increase demand reducing availability of water for water, sanitation and hygiene
- On-site sanitation facilities and wastewater treatment plants emit varying amounts of air pollutants (eg. methane); therefore, technology choice when planning service provision and management of systems can exacerbate or alleviate climate change.

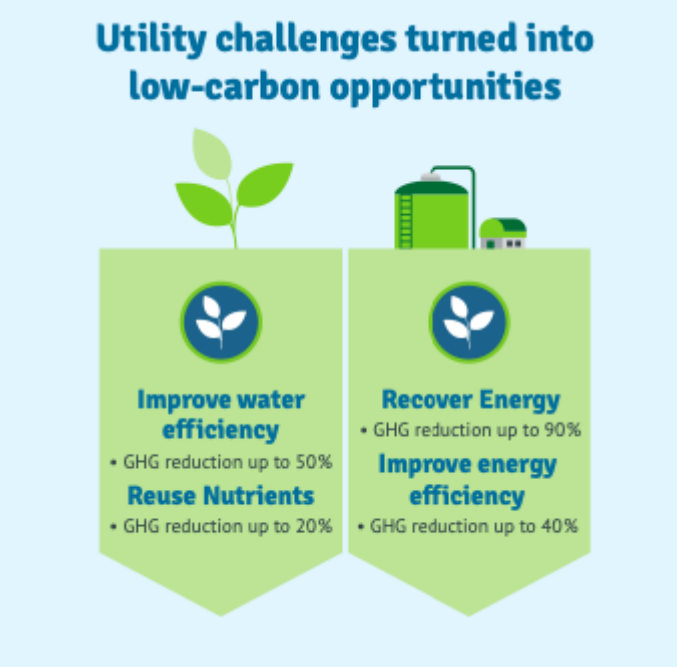

Figure. Low-carbon opportunities for water and sanitation utilities[1]

[1] *Adapted from Simone Ballard et.al. 2018. "Roadmap to a Low-Carbon Urban Water Utility". Water and Wastewater Companies for climate mitigation. IWA Publishing, London, UK.*

Message four

By working together, we can support greater political will to grow the climate finance pie, slice it fairly, and generate return on investment from climate resilient water, sanitation and hygiene

A 2018 report from the OECD showed that out of all global climate finance, 70% went to climate change mitigation activities, 21% went to adaptation and the remainder to crosscutting activities. More than half of all climate finance targeted economic infrastructure – primarily energy and transport - with most of the rest going to agriculture and social infrastructure, including water-related resources and utilities - but mostly in cities rather than rural areas where it is more urgently needed.

As it currently stands, only one tenth the water-related projects attracting climate finance are water, sanitation and hygiene specific - accounting for just 0.3% of global climate finance. **This shortfall presents a critical stumbling block on the path to building climate-resilient water and sanitation.**

that is not to say that climate finance should - or even could - replace existing development finance for water, sanitation and hygiene. But climate finance has the potential to help bridge the funding gap between business-as-usual water services (as covered by traditional development finance), help leverage access to other sources of finance and the help with the important task of making those water services climate resilient,

Under the Paris Agreement, developed nations have jointly committed to mobilizing USD 100 billion per year to address the climate adaptation needs of developing countries, but most are yet to follow through on this commitment.

It is crucial that all sectors work together to help "grow the size of the climate finance pie". **The trillions of dollars being spent by governments on COVID-19 recovery packages has demonstrated that the baseline target of $100 billion annually could be mobilized relatively easily with enough political will.**

It is also important to ensure that sufficient investment is flowing to those most in need.

But if we pay attention to where climate-related development finance for water is flowing, we see that almost all the top 20 recipients are middle-income countries, rather than low-income ones.

Moreover, the vast majority of this finance has been directed towards projects in cities rather than rural areas where communities tend to have lower levels of access to water, sanitation and hygiene, and water, sanitation and hygiene infrastructure that is less resilient to climate shocks.

This is a dramatic and unsustainable divide.

For communities in least developed countries, and especially in rural areas, the ability to both withstand and recover from climate shocks, is severely compromised.

The incremental cost of ensuring that new water and sanitation assets are climate-resilient is estimated to be between $0.9 billion and $2.3 billion per year.

While not negligible, these investments represent around 1 per cent of baseline infrastructure investment needs and would reduce the risk of damage to new infrastructure by 50 per cent.

Leading estimates of the socio-economic gains from investment in water, sanitation and hygiene consistently demonstrate excellent value for money, even where related positive societal impacts such as gender equality are not accounted for.

Studies by the World Bank, UNICEF and others have estimated that the benefits of achieving basic water services can deliver up to US $66 billion in value per year.

Updated analysis from WaterAId confirms the enormous potential return on investment from achieving universal water, sanitation and hygiene, in the order of trillions of dollars of value over the next two decades.

Every dollar spent on strategic flood resilience upgrades could avoid at least US $62 in flood restoration costs. Flood-resilience is a highly cost-effective investment for flood prone areas, with costs significantly lower than those of disruption and repair.

Flooding is the most prevalent climate change-related threat to global water, sanitation and hygiene infrastructure, with service disruptions expected for up to 13% of the population in the most vulnerable countries. But even the developed world is not immune from its impact – as the European floods of 2021 demonstrated so clearly.

The annual cost of securing universal water access is comparatively small, just US $14 billion per year. **Accordingly, these investments can achieve good value for money, with benefits consistently outweighing the costs across all regions worldwide.** But previous studies have failed to properly account for the added benefits of building climate resilient water, sanitation and hygiene services.

Finally, it is important to note, that water, sanitation and hygiene infrastructure underpins system-wide resilience in an economy, improving a country's ability to adapt and mitigate risks of both health emergencies and climate change. This is particularly pertinent as countries seek to "build back better" in the aftermath of Covid19.

In addition:

- The provision of resilient water services can provide up to 21 times more value than expenditure, and are a necessary step towards universal, safely managed, climate resilient water, sanitation and hygiene.
- **Upgrading basic services to safely managed water, sanitation and hygiene infrastructure is a long-term investment that will yield net benefits of US $37–86 billion per year avoiding up to 6 billion cases of diarrhoea and 12 billion cases of helminths between 2021 and 2040, with significant implications for child health and nutrition.**
- It is crucial that climate risks for water, sanitation and hygiene are properly assessed in order to appropriately prioritise and plan infrastructure, and to avoid locking in infrastructure that is ill-equipped to meet future climate needs.
- If countries fail to build climate resilient water, sanitation and hygiene services, their investments will need to be recurrent but will keep being unsustainable/inefficient as climate impacts grow, costing them millions/billions more to replace.
- Universal access to climate resilient water, sanitation and hygiene has direct positive benefits for the livelihoods of billions of people, helping to sustain water resources for small income generation, building healthy populations, and yielding widespread, long-term economic benefits.

Message five

Climate resilient water, sanitation and hygiene is a crucial component of climate action

The creation of climate resilient water, sanitation and hygiene is both a necessary response, and potential solution to climate change - offering benefits both for mitigation and adaptation.

There are a number of bottlenecks and roadblocks on the path to climate resilience, but the good news is that the solutions are known and readily available. For every problem and its consequences, there exists solutions, means and benefits.

There is a growing number of tools, resources, frameworks and successful case studies from other countries to help governments ensure that their NDCs have climate-resilient water, sanitation and hygiene strategies embedded in their infrastructure plans as well as National Adaptation Plans.

The water, sanitation and hygiene sector has come together and, with the goal of advancing our goals of universal access to water and sanitation in ways that acknowledge and adapt to our changing climate, we are making several critical changes to the way that we conduct our work…and we look forward to partnering with all of you to ensure that this happens in every country.

Key Messages

Climate & Water, Sanitation and Hygiene

EXECUTIVE SUMMARY

This Executive Summary and accompanying Key Messages were created to help the SWA partnership, including government policymakers, development partners and advocates from the climate change, WASH and water resource management communities, understand how climate resilient water, sanitation and hygiene are both a necessary response – and a key solution – for climate change adaptation and mitigation.

The link between climate change resilience and access to water: It's basic.

One of the predominant ways in which climate change is felt is through changes in the water cycle, impacting the availability, and quality, of water for diverse uses. Access to water for personal and domestic uses, such as drinking, sanitation and hygiene, is inextricably linked to our changing climate. You can't address one, without addressing the other. People with poor quality WASH services are already some of the most vulnerable groups in society – and climate change only compounds that vulnerability by further compromising these already inadequate services. Whilst climate change impacts pose an immediate and growing threat to WASH, they also provide an opportunity to rethink and do WASH service provision differently for more sustainable and resilient outcomes, but...

You can't fix what you don't prioritise

Despite the incontrovertible links between climate change and access to water, including for the most basic of human needs, our experience shows that these links are all-too-often being overlooked by key policy and decision-makers.

For WASH sector decision makers, consideration of climate resilience is often absent in WASH service provision, sometimes due to poor consideration of water resource management and increasingly because of a lack of adequate climate risk assessment. At the same time, those responsible for designing national policies on climate action also may not systematically include attention to water, sanitation and hygiene as part of those policies. In fact, with just a few exceptions, most countries have not included consideration of resilient WASH services in their national commitments and plans for climate mitigation and adaptation.

Climate change provides renewed impetus to address these longstanding challenges and provide truly resilient and sustainable WASH services, which in turn, can also serve as a solution for both mitigation and adaptation.

Inter-sectoral cooperation and policy alignment between WASH, water resource management, and climate are critical for building effective climate resilience

Failure to integrate WASH resilience into climate adaptation and mitigation planning puts at risk the ultimate objective of climate action – protecting our planet, and all the people who inhabit it. But whilst

national policies for climate action and for the provision of WASH related services need to be aligned and integrated, with just a few notable exceptions, this has not been happening.

Within the sector, failure to properly factor in water resource management and undertake climate risk assessments for WASH, results in wasted investment on infrastructure and services that are not resilient to climate change over the long-term. This breeds a perception that WASH is a risky investment for both development and climate finance. Likewise, the failure by countries to include resilient WASH in their national mitigation and adaptation planning represents a missed opportunity given the potential of climate resilient WASH as a solution for both.

There is an urgent need for countries to undertake robust risk assessments of future climate impacts on water resources broadly, including especially their WASH infrastructure and services, and to integrate resilient WASH into national adaptation and mitigation planning to attract additional climate finance needed to make WASH services resilient to climate change impacts.

Mitigation in the sector is also critically important, as measures introduced to reduce GHG emissions have direct implications for WASH. Conversely, wastewater and sanitation systems have an impact on carbon emissions due to the energy intensity of water treatment and distribution systems.

By working together, we can support greater political will to grow the climate finance pie, slice it fairly, and generate return on investment from climate resilient WASH

It is crucial that all sectors work together to help "grow the size of the climate finance pie". Under the Paris Agreement, developed nations have jointly committed to mobilizing USD 100 billion per year to address the climate adaptation needs of developing countries, but most are yet to follow through on this commitment. **The trillions of dollars being spent by governments on COVID-19 recovery packages has demonstrated that the baseline target of $100 billion annually could be mobilized relatively easily with enough political will.**

It is also important to ensure that sufficient investment is flowing to those most in need. To do this, more resources are needed to support adaptation, and efforts must be made to ensure that resources reach low-income countries.

As it currently stands, only one tenth of water-related projects attracting climate finance are WASH specific - accounting for just 0.3% of total global climate finance. The majority of this investment is flowing to cities and urban utilities in middle-income countries, instead of to low-income countries and rural areas where existing WASH services are already limited and more vulnerable to extreme weather events. This shortfall presents a critical stumbling block on the path to building climate-resilient access to water and sanitation.

The provision of resilient water services can provide up to 21 times more value than expenditure, and are a necessary step towards universal, safely managed, climate resilient WASH. Leading estimates of the socio-economic gains from investment in WASH consistently demonstrate excellent value for money. One recent study has confirmed that the potential return on investment from achieving resilient universal WASH is in the order of trillions of dollars of value over the next two decades.

Climate resilient WASH is a crucial component of climate action

The creation of climate resilient WASH is both a necessary response, and potential solution to climate change - offering benefits both for mitigation and adaptation. There are a number of bottlenecks and

roadblocks on the path to climate resilience, but the good news is that the solutions are known and readily available. The water sector has a role to play in advocating for increased and better targeted resources for climate resilient WASH projects, as part of efforts to ensure sustainable integrated water resource management, and the realization of basic human rights.

GLOSSARY

Adaptation:

The process of adjustment to actual or expected climate and its effects. In human systems, adaptation seeks to moderate or avoid harm or exploit beneficial opportunities. In some natural systems, human intervention may facilitate adjustment to expected climate and its effects. Adaptation examples in WASH include: Reviewing and updating WASH policies and strategies to account for climate risks; strategically developing groundwater resources; targeting areas/communities affected by climate hazards by providing climate resilient WASH systems; education and training of community groups for climate-responsive management.

Mitigation (of climate change):

A human intervention to reduce the sources or enhance the sinks of greenhouse gases (GHGs). This includes human interventions to reduce the sources of other substances which may contribute directly or indirectly to limiting climate change. Mitigation examples in WASH: improving water and energy efficiency and ensuring, where possible, the use of renewable energy for water and sanitation operations; energy generation from waste.

Risk:

The potential for consequences where something of value is at stake and where the outcome is uncertain, recognizing the diversity of values. Risk is often represented as a probability or likelihood of occurrence of hazardous events (e.g., Droughts, floods etc) or trends multiplied by the impacts if these events or trends occur. Note: Risk Assessment for WASH can be facilitated following the GWP-UNICER sector tool.

Nationally determined contributions (NDCs):

NDCs are national climate plans highlighting climate actions (mitigation and adaptation), including climate related targets, policies and measures governments aim to implement in response to climate change and as a contribution to global climate action. Central to the NDCs is the concept of national determination.

National adaptation plans (NAPs):

NAPs enable countries to identify medium- and long-term adaptation needs and developing and implementing strategies and programmes to address those needs. It is a continuous, progressive and

iterative process which follows a country-driven, gender-sensitive, participatory and fully transparent approach.

PROBLEMS & CONSEQUENCES	SOLUTIONS & BENEFITS	TOOLS & RESOURCES
Problem: Lack of attention from the climate community to adaptation needs and mitigation opportunities for WASH services **Consequences:** Lack of integration of WASH into climate resilience planning and policy leads to reduced effectiveness of both. Lack of prioritisation of basic human needs for resilient access to water, sanitation and hygiene adversely impacts community resilience to climate change Reduction of community resilience undermines overall climate resilience planning and outcomes Mitigation opportunities from WASH sector are lost Governments can't access climate finance to help build resilient WASH services and systems	Climate policy and decision-makers need to understand the adaptation needs, mitigation opportunities and risks that climate change pose to the delivery of sustainable, resilient WASH services. Better understanding of the needs, opportunities and risks will help drive integration and alignment between climate policy and WASH, reduce policy gaps, minimise wasted investment and improve community resilience Better understanding of the intersection of WASH and climate change can help make climate policy more robust and effective. Additional climate finance can be attracted to help make WASH services more resilient	SWA Briefing Paper 3 – Climate Change
Problem: Lack of climate risk analysis being integrated into WASH policies, programs and strategies **Consequences:**	Policy and decision-makers need to understand the challenges and risks that climate change poses to the delivery of sustainable, resilient WASH services.	UNICEF & GWP WASH Climate Resilient Development – Strategic Framework

Non-resilient WASH services that are increasingly vulnerable to climate shocks Wasted investment in non-resilient WASH programs Reduced community access to basic WASH Lack of integration of WASH into climate resilience planning and policy results in reduced effectiveness of both Access to climate finance is unavailable	Better understanding of climate risks will help policy and decision-makers integrate and align climate and WASH policies. This will help improve resilience of services, reduce climate risk and help attract supplemental climate finance Undertaking climate risk analysis is crucial for WASH policy and decision-makers to avoid wasted investment, bridge policy gaps, advance beyond business as usual and move forward together Additional climate finance can be attracted to help make WASH services more resilient	WASH Climate Resilient Development – Risk Assessments for WASH
Problem: Lack of access to climate finance for building climate resilient WASH services (particularly for low-income countries) **Consequences:** Opportunities are lost for bridging the funding gap between basic/"business as usual" and climate resilient WASH WASH services remain exposed to climate shocks and universal access is unachievable	By undertaking climate risk analysis and incorporating it into WASH policy planning, climate change policy and resilient WASH policy can be aligned and integrated Alignment and integration of climate change and WASH policy can help countries include resilient WASH policies into NDCs and NAPs Inclusion of WASH policies into NDCs and NAPs can help attract climate finance to help build resilient services Resilient WASH services build community resilience, and help ensure universal access to water, sanitation and hygiene Universal access to WASH has flow on benefits to education, health and socio-economic development	SWA Water & Sanitation - How to Make Public Investment Work: A Handbook for Finance Ministers WaterAid and ODI Just add water: a landscape analysis of climate finance for water

	Investment in WASH can be an effective means of achieving transformative economic growth in the wake of COVID-19	
Problem: Lack of monitoring and evaluation of climate resilient WASH **Consequences:** Inability to identify and prevent adverse climate impacts and risks Inability to assess climate resilience readiness and performance Missed opportunities for mitigation in the WASH sector You cannot manage what you cannot measure	Improving monitoring and evaluation of WASH services and systems helps identify and minimise risk, and build climate resilience of WASH services Better monitoring and evaluation help improve resilience readiness and WASH service performance Opportunities for mitigation are more easily identified and achieved Management of WASH services is made easier	SWA RESULTS FRAMEWORK for Monitoring & Evaluation