



**UN Climate Change COP 28  
Dubai, United Arab Emirates**

**Implementation Lab  
Concept Note  
“Passage of Water”**

Marrakech Partnership for Global Climate Action

**December 10th**

TIME (60 minutes)

**16:00-17:00**

ROOM: Global Climate Action zone - Lab 1 (Al Shaheen)- Blue Zone

Organised by [Google, NASA]

## MP “Implementation Lab”: Passage of Water: Concept note

<p><b>Description</b></p>	<p>Short description of the event itself (<i>no longer than 300 characters including spaces</i>):</p> <p>An interactive session on how data, technology and art catalyse restoration of vital wetlands and rivers. Deep dive into NASA satellite data, innovative technology and visual interpretations proffered in the digital project, Passage of Water by artist <a href="#">Yiyun Kang</a>, <a href="#">NASA</a> and <a href="#">Google Arts &amp; Culture</a>.</p>
<p><b>Headline</b></p>	<p>Phrase in a way that could be picked up easily by the press:</p> <p>Passage of Water: Arts and technology show the interconnectedness of freshwater and climate change</p>
<p><b>2030 Breakthrough / SAA outcomes</b></p>	<p>Breakthrough or SAA Outcome theme to be worked on during session</p> <p>This event clearly links to the newest SAA Water Outcome: <i>Restore 300,000km of rivers and 350 million hectares of wetlands by 2030</i>. This event will aim to showcase how innovative tech can play an instrumental role in accelerating this target.</p>
<p><b>Guiding Question</b></p>	<p><i>How can innovative technology and artistic applications of data support the newly added freshwater target in the SAA and accelerate awareness and action ?</i></p>
<p><b>Targeted Outcomes</b></p>	<p><i>How does this event contribute to the COP28 outcomes on progress in implementation of mitigation/resilience goals?</i></p> <p>Through Google’s online visual project and physical installation in collaboration with NASA, this event will showcase the management of freshwater supply globally with a focus on the Middle East region, the US and India, and will highlight adaptation methods and solutions that have been provided by the IPCC in the 6th assessment report. This data has great potential to feed into the Global Tracker for the Fresh Water Challenge to support tracking of Parties and non-Party stakeholders NDCs and NAPs implementation of the SAA.</p> <p>Examples featured are:</p> <ul style="list-style-type: none"> <li>- The history of global freshwater supply vs today</li> <li>- Need for implementation of rainwater harvesting or water and soil water conservation as some of the solutions / adaptation methods suggested.</li> </ul>
<p><b>Objectives</b></p>	<p>Please share more information on how this Roundtable discussion will:</p> <ul style="list-style-type: none"> <li>• Showcase of forward looking solutions that are enabling us to achieve the 2030 breakthrough/SAA outcomes             <ul style="list-style-type: none"> <li>○ There has been a growing recognition of the importance of sustainable freshwater management practices, such as rainwater harvesting. This event</li> </ul> </li> </ul>



	<p><i>will show the positive aspects of Rainwater harvesting. Further to this, the event will discuss how to scale such solutions + we will put forward a few more sustainable solutions and discuss how communities can support their implementation and management</i></p> <ul style="list-style-type: none"> <li>● <i>Discuss key roadblocks to resolve these barriers</i> <ul style="list-style-type: none"> <li>○ <i>There are several barriers to implementing sustainable freshwater management practises some of these include:</i> <ul style="list-style-type: none"> <li>■ <i>Lack of technical knowledge</i></li> <li>■ <i>Lack of awareness and education about the benefits</i></li> <li>■ <i>Lack of clear and engaging communication about the data and the consequences</i></li> <li>■ <i>Lack of willingness to change and the need for behavioural change</i></li> <li>■ <i>Inclusion, availability and accessibility challenges of representative datasets and data-driven policy-making</i></li> </ul> </li> </ul> </li> <li>● <i>Enable collaboration to replicate solutions at scale across different regions</i> <ul style="list-style-type: none"> <li>○ <i>Reduce metadata through visuals and storytelling to allow for intuitive engagement on the issues reported, connecting audiences with the negotiations at COP and the IPCC reports</i></li> <li>○ <i>Using technology and innovation to benefit researchers and policymakers in water-scarce regions by being based on real-world data and by sharing innovative solutions to the current mitigation challenges.</i></li> <li>○ <i>Discuss the importance of bringing cutting edge scientific data (like those from the SWOT mission) to youth audiences to help educate and empower them to develop solutions in their own communities.</i></li> </ul> </li> </ul>
<p><b>Session Outcomes</b></p>	<p><i>Please share three key outcomes this event plans to achieve:</i></p>
<p><b>Participants</b></p>	<p><i>Which stakeholder groups (from Party and non-Party) do you need to take part in the event to achieve the outcomes?</i></p> <ul style="list-style-type: none"> <li>● <b>Government</b> - (Dr. Kate Calvin (NASA Chief Scientist and Senior Climate Advisor), NASA)</li> <li>● <b>Academics and research institutions</b> - Bringing the scientific urgency to act now. (Aditi Mukherji (CGIAR, IPCC water expert) and Yiyun Kang (Artist and Researcher), Dr Carol O’Donnell (Director of the Smithsonian Science Education Center</li> <li>● <b>Private sector</b> - including corporations with water/climate impact (Clare Brooks (Global Lead for Sustainability for Google Arts and Culture) , Google)</li> </ul>
<p><b>Key Action points out of the discussion</b></p>	<p><i>Please summarise in no more than 150 words the 3 most ambitious action points that participants of the discussion should come out of the event with to enable reaching the 2030 target/outcome</i></p>

	<ul style="list-style-type: none"> <li>● Introduction to the freshwater cycle and historical trends of water movement and management</li> <li>● The current state of freshwater availability seen through A Passage of Water and GRACE and SWOT data - through A Passage of Water visuals + the connection between the oncoming crisis, climate change and human activity</li> <li>● How can technology, innovation, science and art come together to inform and educate and in turn help make an impact on freshwater awareness and solution management and engagement.</li> </ul>
<p><b>Logistics</b></p>	<p>Room layout: Round Table room Capacity Room 1: 175 total pax</p> <ul style="list-style-type: none"> <li>● 60 seats at the inner circle table with microphones. Suggest 20-30 targeted attendees with reserved seating</li> <li>● 90 seats in the outer circle (overflow)</li> </ul> <p>Capacity Room 2: 96 total pax</p> <ul style="list-style-type: none"> <li>● 32 seats at the inner circle table with microphones. Suggest 20-30 targeted attendees with reserved seating</li> <li>● 55 seats in the outer circle (overflow)</li> </ul>

**Considerations for planning your event:**

- **Diversity & Inclusion**
  - Curating diverse and inclusive events is paramount for the High Level Champions at COP 28. Please ensure balance in gender, geography, and spectrum of stakeholders across all levels of government and sectors.
  - Please see the diversity and inclusion [guidelines here](#).
  - For COP 28 we will be introducing a measurement framework for diversity and inclusion, which event organisers will need to track against. We encourage you to track your speaker information in the [Speaker Tracker Template](#)
- **Speakers**
  - The incoming COP 28 Presidency and the High-Level Champions will be recommending a few speakers/participants for the thematic action events based on their outreach and mobilization efforts for the COP.
  - We recommend **no more than 3 speakers** in a panel  
10 of badges will be available
- **Content**
  - A requirement for all GCA events is for events to have balance content, showcasing **50% mitigation** content and **50% adaptation and resilience** content
- **Outcomes Reporting**
  - Event organisers will be required to report on content balance and diversity & inclusion in the [Outcomes report](#) post event

## Prospective Agenda



The table below includes examples of information that should be included as part of the agenda. Please ensure the event is *as interactive as possible* with a mix of different discussion formats, including fire-side chats/case study presentations/one-on-one interviews/dynamic videos. Please limit the number of speakers to a **maximum of 3 per discussion** in this 90 minute session.

Please refer to design guidance and format tips [here](#).

Timing	Session Description	Speaker suggestions <i>Stakeholder group, name, title, organisation, gender, geography</i>	Notes / Format tips
<i>Pre event</i>	<i>Trailer for the project on screens</i>		
<i>3 mins</i>	<p><i>Segment title: Welcome &amp; Introduction</i></p> <p><i>Event overview and framing question:</i></p> <p><i>What does it take today, to accelerate the scaling up of more sustainable means of freshwater management and harvesting so we reach UN SDG “Goal 6, Ensure access to water and sanitation” by 2030?</i></p> <p><i>Vision: SDG5 is achieved, an ecosystem in balance, water nature-based solutions providing water, food, and mitigation outcomes – enabled through reinvented water governance, data-driven intelligence and catalytic behavioural change</i></p>	<i>Moderated by Lovisa Bergman</i>	
<i>5 mins</i>	<p><i>Segment title: Opening remarks</i></p> <p><i>Opening remarks: Framing of the breakthrough in focus, why it’s important. Vision for 2030 - where we are now and where we want to get to.</i></p> <p><i>The connection between the oncoming crisis, climate change and human activity + the impacts of the freshwater crisis</i></p>	<p><i>Speaker:</i></p> <p><b><i>Academia: Aditi Mukherji</i></b> <i>(IPCC scientist, Director, Climate Change Adaptation and Mitigation Impact Action Platform CGIAR) - (f, India)</i></p>	



5 mins	<p><i>Lightning Talk #1: The role of satellite data</i></p> <p>Introduction to the freshwater cycle and historical trends of water movement and management as seen through GRACE and new never seen before SWOT data. NASA's Earth Sciences work and how this data helps policy-makers and scientists with their research.</p>	<p><i>Speaker recommendations:</i></p> <p><b>Government: Dr Kate Calvin</b> (NASA, Chief Scientist, f, US); NASA JPL Research Scientist Benjamin Hamlington</p>	
8 mins	<p><i>Lightning Talk #2: Showcase Passage of Water</i></p> <p>Presenting the visual data interpretation and the storytelling behind the research.</p> <p>The current state of freshwater availability seen through A Passage of Water - GRACE and SWOT visuals.</p> <p>The need for cultural partnerships to tell these stories and engage with broader audiences on the issues / data / science / reports</p>	<p><b>Private Sector: Clare Brooks</b> (Google, f, UK/FR)</p>	<p><b>Presentation on screen with audio</b></p>
5 mins	<p>Lightning Talk #3: freshwater restoration targets and solutions</p> <p>Framing and distilling the solutions and adaptation methods from the IPCC 6th Assessment Report</p>	<p><b>Academia: Aditi Mukherji</b> (IPCC scientist, Director, Climate Change Adaptation and Mitigation Impact Action Platform CGIAR) - f, India</p>	<p><i>Fireside chat with questions by moderator</i></p>
25 min	<p><b>Panel discussion:</b> How can technology, innovation, science and art come together to raise awareness and help make an impact on education around freshwater, solution management and engagement at scale.</p> <p><b>Quick ice-breaker to engage the panellists</b> <i>In one word, how would you describe the past week here in Dubai? (2 mins)</i></p> <p><b>Vision statement &amp; problem at hand</b> <i>Aditi, you elaborated on the vision for 2030 in your opening remarks. What are the elements in this dream that keep you awake at night? (3 mins)</i></p> <p><i>Andre, you work with mobilising some of the world's largest companies to improve water stewardship. What role does business play in</i></p>	<p><i>Speakers:</i> <i>Dr Aditi Mukherji, Dr Kate Calvin, Dr Carol O'Donnell, Andre Vailhaça Ramalho, Clare Brooks</i></p>	<p><i>open dialogue</i></p>



	<p><i>achieving the newest SAA Water Outcome by 2030? (3 mins)</i></p> <p><b>Solutions</b>  <i>Clare, Passage of Water is a powerful example bringing together scientists, policy makers and technology to improve awareness about the current state the climate and water. What is needed from us to achieve breakthroughs? What radical collaborations are possible? (3 mins)</i></p> <p><i>Kate, NASA has been involved in breakthrough solutions since decades now -- but very often, data is not accessible for all. How can we make these solutions accessible for all? What is needed to create scalable solutions across different regions? (3 mins)</i></p> <p><b>Future outlook (if time allows)</b></p> <p><i>Aditi, what effective means of communication and storytelling have you seen in the international climate discussions? What lessons can we draw upon when we discuss the water crisis? (2 mins)</i></p> <p><i>Andre, what does “holistic water stewardship” mean for companies? What water issues concern the private sector the most, and what do you think they need to pay more attention to in the next 7 years towards 2030? (2 mins)</i></p> <p><i>Clare, change is all about people. How do you believe art, innovation and technology will impact human behaviour in the next decade? (2 mins)</i></p> <p><i>Kate, in the spirit of transformative change, what do you wish the world shall have achieved when we sit here next year? (2 mins)</i></p>		
5 min	<p><i>Lightning Talk #4: education and community</i></p> <p><i>Bridging the gap between complex cutting edge scientific data and youth audiences to help educate and empower them to develop solutions in their own communities.</i></p>	<p><i>Speaker:</i>  <b>Research institution: Dr Carol O'Donnell</b> (Director of the Smithsonian Science Education Center)</p>	
3 min	<p><i>Next steps and Closing Remarks</i></p>	<p><i>Moderator:</i></p>	



## **ANNEX / Supporting materials**

### **Background**

[Google Arts & Culture](#) are collaborating with [NASA](#) and artist [Yiyun Kang](#) on a visual data-led project that engages audiences on Fresh Water availability around the world.

The project is part of Google Arts & Culture's ongoing Sustainability residency [Heartbeat of the Earth](#), which invites science, art and technology to come together to create tangible means of understanding our planet and engaging with the climate crisis.

The artwork will be both an online interactive experience and live as a physical installation for delegates to interact with in the Luxembourg Pavilion, Blue Zone.

This project delivers the Earth's freshwater story to raise awareness and acknowledge how we can better respond to the current crisis with sustainable solutions.

It emphasises that understanding the relationship between climate change, global hydrology and the local water crisis will help to predict and respond to water problems.

It also illustrates which sustainable solutions could be used to achieve this goal, and gives the user the agency to choose between different solutions proposed by IPCC experts, for a more positive future.