

1 THE CONVENTION ON PLANETARY HYDROLOGICAL SECURITY AND CRYOSPHERE STABILITY

1.1 Preamble

The States Parties to this Convention (hereinafter referred to as “the Parties”),

Deeply concerned that, over the past decades, climate change has led to widespread shrinking of the cryosphere, with mass loss from ice sheets and glaciers, reductions in snow cover and permafrost thaw, which have decreased the stability of high mountain areas, increased damage from glacial lake outburst floods, and changed the amount and seasonality of runoff and water resource availability from snow-dominated and glacier-fed river basins;

Emphasizing that glacier and snow melt significantly affects communities near and far from glaciers, disrupting the availability of freshwater resources that billions of people depend on for drinking water supplies, irrigation, livelihoods, and energy production, and resulting in loss of cultural and natural heritage, including the biodiversity and ecosystems that depend on cryosphere-fed water systems- such as glacier-fed streams and rivers, permafrost-dependent tundra, alpine meadows dependent on snowpack, and ice-associated marine ecosystems- disproportionately affecting local populations, Indigenous Peoples, and species that rely on frozen freshwater systems for their survival;

Recognizing that glaciers supply freshwater to over half of humanity and that their rapid retreat threatens long-term water security for billions of people, with desertification advancing as the cryosphere retreats, and the balance of water and temperature being broken;

Recognizing also that the protection of headwaters, springs, groundwater, and the sources of rivers is inseparable from the protection of the cryosphere, and that the conservation of these systems is essential for maintaining hydrological continuity, sustaining ecosystems, and securing freshwater supplies for communities;

Acknowledging that the cryosphere- Earth’s coupled system of glaciers, ice sheets, sea ice, snow, and permafrost- is fundamentally linked to the security, infrastructure, and economic stability of societies worldwide, and that decisions and actions taken this decade will influence the fate of the cryosphere for centuries and beyond;

Realizing the interconnections between glaciers’ preservation and the protection, conservation, restoration, and sustainable management of ecosystems, as well as their linkage with climate action, biodiversity conservation, disaster risk reduction, and combating desertification;

Recalling United Nations General Assembly Resolution 77/158 of 14 December 2022, which declared 2025 the International Year of Glaciers’ Preservation and proclaimed 21 March of each year as the World Day for Glaciers;

Recalling also United Nations General Assembly Resolution 78/321 of 13 August 2024, which proclaimed the period from 2025 to 2034 as the Decade of Action for Cryospheric Sciences;

Noting the Dushanbe Water Process, including the series of High-Level International Conferences on the International Decade for Action “Water for Sustainable Development” convened by the Government of Tajikistan, which have advanced international water cooperation and contributed to the preparatory process for the 2026 United Nations Water Conference, and further noting the Dushanbe Glaciers Declaration of May 2025, adopted within the framework of this process, which affirmed the importance of glaciers and the broader cryosphere for global

sustainable development, environment, and climate agendas, and recognized the need for reliable and sustained glacier, snowpack, and permafrost monitoring to inform future projections and preparedness;

Reaffirming commitment to the United Nations Framework Convention on Climate Change and the Paris Agreement, including the outcomes of the first Global Stocktake at COP28, and noting that decreases in global greenhouse gas emissions are essential to limit glacier and mountain cryosphere losses and ice sheet melt;

Noting the findings of the Intergovernmental Panel on Climate Change (IPCC) Special Reports on the Ocean and Cryosphere in a Changing Climate (SROCC), which documented the accelerating loss of glaciers and ice sheets and highlighted the cascading risks to water security, ecosystems, and human societies;

Recognizing that the need for a worldwide inventory of existing perennial ice and snow masses was first considered during the International Hydrological Decade (1965-1974), declared by UNESCO;

Acknowledging the importance of responsible adaptation in the face of glacier loss and the emergence of post-glacial ecosystems;

Noting the convening of the United Nations Water Conference in 2026, and the 2028 United Nations Conference on the Final Comprehensive Review of the Implementation of the Objectives of the International Decade for Action, “Water for Sustainable Development,” as established by United Nations General Assembly resolution 78/327 of 6 September 2024, as critical opportunities to strengthen linkages between water, glaciers, and climate action;

Recognizing the role of the UN Convention on the Protection and Use of Transboundary Watercourses and International Lakes (UN Water Convention) as a model for transboundary water cooperation, including its foundational principles of equitable and reasonable utilization and the prevention of significant harm, and the importance of integrated water resources management guided by the precautionary principle, the polluter-pays principle, and the principle of intergenerational equity;

Acknowledging the importance of the Steppe Action Agenda, including the Rangelands Flagship Initiative, the Water-Land Nexus Initiative, and the Nature-Based Solutions for Sustainable Infrastructure Initiative, being advanced by Mongolia in the context of the 17th Session of the Conference of the Parties to the United Nations Convention to Combat Desertification (UNCCD COP17), hosted in Ulaanbaatar in August 2026;

Noting the Belém Joint Statement on the Rio Conventions of November 2025, adopted at the thirtieth session of the Conference of the Parties to the United Nations Framework Convention on Climate Change, which committed the Presidencies of the three Rio Conventions to work together on policy coherence, integrated planning, shared data systems, and coordinated implementation in preparation for the 2026 COP triennial;

Recalling the Convention on Biological Diversity, the Kunming-Montreal Global Biodiversity Framework, and its target to protect 30 per cent of the world’s land and ocean by 2030 (30x30), and noting the importance of protecting cryosphere-dependent ecosystems and wetlands of international importance under the Ramsar Convention;

Recognizing the importance of the Peace Forest Initiative, launched under the United Nations Convention to Combat Desertification, which demonstrates the interlinkages between ecological restoration, peacebuilding, and conflict prevention, and further recognizing that cryosphere protection contributes to peace and security by preventing water scarcity and displacement;

Recognizing that water is the foundation of life, that the three states of water- solid, liquid, and gas- constitute a single interconnected planetary system, and that balancing the three states of water is essential for hydrological security, climate resilience, biodiversity conservation, and international peace;

Further recognizing the distributed pond system as the operational mechanism for cryosphere protection and desertification reversal, which captures 0.01% of annual global rainfall—approximately 52 billion cubic meters of water—through a network of ponds, artificial lakes, infiltration structures, and green-ring ecosystems, holding water on the surface longer to restore vegetation, suppress dust, recharge groundwater, and protect permafrost.

Noting that the distributed pond system, through the Green Web along the 43–44° North Latitude Belt, the Global Steppe and Drylands Initiative, and the Global Steppe and Rangelands Initiative, captures 0.01% of annual global rainfall—approximately 52 billion cubic meters of water—through a network of ponds initially targeting 1,000,000 structures and scaling to at least 1 million ponds and artificial lakes by 2100, and generates Internationally Transferred Mitigation Outcomes (ITMOs) under Article 6.2 of the Paris Agreement, thereby contributing to a self-financing mechanism for planetary hydrological security while supporting the G20’s ambition to reduce degraded land by 50% by 2040 and complementing the 1.2 billion hectares of global restoration commitments.

Emphasizing the need for adequate, predictable, and sustainable financial resources to support the implementation of this Convention, including through the establishment of a Cryosphere Protection Trust Fund to mobilize resources for scientific cooperation, capacity building, technology transfer, restoration projects, monitoring systems, and implementation by developing countries;

Recognizing the importance of a just transition for communities and workers affected by the transformation towards planetary hydrological security, and emphasizing the need to protect the rights and livelihoods of Indigenous Peoples, local communities, women, youth, and vulnerable populations;

Determined to take appropriate action in preserving the cryosphere and ensuring planetary hydrological security for the benefit of present and future generations;

Have agreed as follows...:

The 0.01% Solutions–Green Web–Cryosphere Convention Initiative Team

An independent, civil society initiative

In alignment with the Steppe Action Agenda under Mongolia’s UNCCD COP17 Presidency

At the UNCCD COP17

Ulaanbaatar, Mongolia

August 17-28, 2026