

# Policy Recommendations and Key Takeaway Points

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*Blue Papers* was set up to connect academic and practical analysis of water, culture, heritage and sustainable development and provide concepts, methodologies and case studies to guide policymakers in developing value-based decisions and strategies. The first five issues of the journal brought together over 130 authors from academia, practice, private sector, major public institutions and NGOs. Their insights from multiple sectors and scientific fields – including policymaking, governance, water management, biology, urban planning, heritage and history – shed light on global and local dynamics, challenges and approaches to contemporary urgencies in the water sector and their impact on space, society and culture. The 85 articles so far published in *Blue Papers* have explored examples from 31 countries, highlighting positive and negative aspects of governance, historical processes and socio-cultural practices related to water.

*Blue Papers* has attracted a growing number of readers, with 7769 views (of the main web page) and over 5500 downloads in 2023. The analysis of featured articles showed that some topics were addressed by many different authors, and some subjects attracted more readers than others. Notably, the articles attracting the most attention focused on Indigenous and traditional water management systems, examples of underwater cultural heritage, and the commercial exploitation of water ecosystems and its effect on non-human actors.

We are convinced that the perspectives presented in *Blue Papers* are crucial to further exploring current connections between sectors focused on water, culture, heritage and sustainable development and establishing new ones. We are grateful that this project has attracted new partners and has welcomed WAMU-NET (Global Network of Water Museums), the UNESCO Chair in Cultural Heritage and Urbanism, and the UNESCO Chair River Culture in supporting its objective. This project is under constant reevaluation, with its format and strategies being refined to expand its global outreach and address more diverse culture-related aspects.

There are three main trends emerging from the first five issues of the journal. The **first thematic line** identifies the need for system analysis and multi-scalar thinking to address the multiple aspects of water and create synergies among different stakeholders. The **second** one recognizes that today's water challenges affect many different sectors of society. Collectively, they show a strong need for solutions that target a variety of problems simultaneously and trigger positive ripple effects from neighborhood to city to territory. This requires a greater emphasis on interdisciplinarity and the need for a deep understanding of local contexts and values to design fully sustainable solutions. The **third thematic line** concerns financing, technology and economic development. There

are many innovative ideas, tools, projects and programs that lack access to adequate funding. New business ideas need to include value-based solutions that are also abreast with newer, better information and communications technologies including artificial intelligence. Contemporary water (heritage) challenges need these answers to test and implement their solutions in circular economies, a sustainable model that creates further value by the continuous use and reuse of materials thereby reducing waste to a minimum.

Starting with the fifth edition of *Blue Papers*, the editorial team has proposed integrating the “Policy Recommendations” section at the end of each contribution to better serve our target audience and collect actionable insights regarding the integration of water-related heritage and its associated values and practices in future management strategies.

The following section outlines policy recommendations that the editorial team of *Blue Papers* extrapolated from the first five issues. Together, these articles propose guidelines to increase **awareness, collaboration, capacity building, and innovative policy and planning** based on a scientific foundation. In addition, a collection of novel methodologies has been tested in different contexts worldwide.

### Summary of Policy Recommendations:

#### Recognition of Multiple Dimensions of Water

- Raise awareness about all the dimensions of water and water heritage (tangible, intangible, natural, man-made, cultural, spiritual, above and below water). Recognize water as a resource intertwined with history, politics, ecology, the built environment, spiritual and socio-cultural contexts, and a multiplicity of associated values held by various actors across the sites.
- Adopt a holistic approach to policy frameworks, environmental management and conservation that recognizes the intangible relations between cultural and natural landscapes to support sustainable traditional practices and comprehensive, integrated stewardship.
- Leverage human experiences evoked by water - such as hope, fear, ecological grief and historical significance – including spiritual and secular systems of belief – through the creation of museums, interpretive centers and the integration of heritage sites into contemporary water management. The goal is to inspire dialogue, learning, and transformation across conflicting identities and power dynamics.

#### Adaptation, Preservation and the Re-Use of Water Heritage

- Promote comprehensive analysis of past and current socio-cultural practices associated with water systems, including their political and institutional structures, forms of management and impacts on various social groups, the environment, and non-human entities.
- Repurpose and revitalize obsolete water heritage structures by analyzing their hydrological flows and networks and promoting and implementing “active preservation” strategies that align with the Sustainable Development Agenda.

- Incorporate traditional, sustainable water management practices and environmentally friendly techniques embedded in local communities' ways of life and environmental conditions into future spatial planning and development strategies, leveraging the co-production of knowledge between humans, technology and nature.

#### **Collaboration, Diversity and Empowerment to Promote Sustainable Water Practices**

- Incentivize interdisciplinary research projects that holistically examine complex, interconnected relationships between communities, landscapes and environmental phenomena like climate change.
- Enhancing communication and cooperation between various sectors by defining common terminology and concepts, clarifying goals and assigning specific tasks to each stakeholder to improve coordination and effective participation.
- Long-term visions for water and heritage management require investment in and support of diverse coalitions involving communities, institutions, NGOs, scientists, practitioners and international organizations to forge more inclusive governance and planning, monitor environmental quality and heritage sites, and possibly facilitate responses from public institutions.

#### **Capacity Building and Inclusion**

- Expand the use of new technologies (e.g., those used in monitoring) and data collection to inform future actions and integrate such technologies with existing sustainable practices rooted in social, ecological and cultural settings. Ensure continuous revision of collected data to respond to dynamic contexts.
- Develop strategies to identify and include actors and community representatives who can effectively communicate local needs to decision-makers.
- Employ skilled facilitators to translate diverse perspectives and align interests for collaborative problem-solving.
- Promote the co-production of knowledge by involving diverse stakeholders from the private and public sectors, including the local community, Indigenous people and youth, in guiding deliberation, design processes and implementation of solutions.

#### **Policy and Planning**

- Recognize responsibility and accountability for past activities that continue to impact the present-day physical, social and cultural landscape to promote socio-ecological and spatial water justice and safeguard the future.
- Adopt comprehensive, adaptive and integrated water management solutions and planning that prioritize long-term sustainability over short-term gains and responses while respecting local contexts to improve mediation between different institutional frameworks and stakeholders under a shared long-term vision.
- Strengthen partnerships between government agencies and local communities to implement participatory, culturally appropriate approaches to water conservation; recognize and support customary water tenure by developing legal tools that integrate heritage,

- culture and existing technical, financial, social and institutional resources.
- Conduct comprehensive risk assessments that balance economic, environmental and cultural considerations to identify and prioritize the most critical water-related risks facing governmental actors, citizens and ecosystems.
  - Establish legal and policy frameworks that recognize water bodies as political subjects with inherent rights and needs and as hydro-social territories co-created and co-inhabited by diverse human and non-human entities to strengthen the protection of vulnerable ecosystems and communities while ensuring the inclusiveness of these policies.
  - Establish governance frameworks that foster interdisciplinary collaboration, knowledge exchange and comprehensive approaches integrating traditional and scientific knowledge to manage water resources and cultural heritage within spatial planning across different scales.

#### **Finances and Economy**

- Implement funding and support mechanisms that support local efforts to integrate traditional knowledge into regional and national water-management strategies.
- Fund programs aimed at the long-term development of a territory as a whole, which are sensitive to the different values represented rather than solutions focused on single tasks and fast economic gains.
- Allocate resources for knowledge exchange and collaboration for projects, conferences and forums across countries.
- Secure finances for hiring interdisciplinary teams, especially people with local connections and knowledge about the context of intervention and the different values and interests at play.