Water Beyond Boundaries: A new agenda for managing a vital resource.

Water management that is environmentally sustainable and equitable requires a better understanding of connections beyond the watershed, inclusive participatory approaches, and the water needs of ecosystems. WBB aims to deliver that knowledge and the tools to use it.

Water management is getting increasingly difficult. Growing demand and a changing climate are posing critical challenges for policymakers, who must grapple with both an uncertain future and competing interests, ensuring water security for people, cities, agriculture, and ecosystems is at risk.

The status quo to addressing these challenges is Integrated Water Resource Management (IWRM). While the past three decades have seen IWRM having a profound impact on water planning practices, it has not yet yielded sustainable water management outcomes. The results can inadvertently create conflict, exclude critical users, or ignore gaps in water management.

The Stockholm Environment Institute is introducing new ways of thinking about sustainable water planning through its Water Beyond Boundaries (WBB) initiative. The objective is bold and ambitious: create a new agenda for managing water that addresses the challenges of scale, scope, and time, currently missing in IWRM applications.

This new agenda will be relevant, realistic, and rigorous, addressing the three gaps in the IWRM framework, stretching water management to be more comprehensive, successful, and inclusive.

The Pillars

- **Water (Tele) Connections**
  Sustainable water management should reach beyond the watershed, with participatory processes based not only on place but also on impact. We are developing models and processes that include consideration of resource flows and spheres of decision-making outside the immediate area.

- **Early ecosystem consideration:**
  Ecosystems should be considered throughout the water management and planning process. We are developing approaches and analytical engines that incorporate ecosystem needs and processes in water management models and tools.

- **Multi-interest, multi-scale participatory approaches**
  Collaborative and inclusive engagement in water management delivers more effective long-term outcomes. We are introducing multi-scale analysis tools, enabling policymakers to see not only watershed-wide water demand and supply, but also smaller-scale differences that illuminate inequalities, addressing issues of poverty, gender, and marginalised groups inclusion.
The needs

Water plays a central role in global sustainability agendas, making it crucial to get water management right. Many of the Sustainable Development Goals are interlinked by water (i.e. SDGs 6, 11 and 14). Human populations, economic activities and ecosystem processes all rely on water, and its importance transcends countries, regions, interests and generations.

WBB will also have an important connection to poverty alleviation and gender and social equity. New analysis tools will enable water planners and policymakers to identify inequalities at multiple scales and dimensions of water use, to identify all stakeholders, and to consider innovative management practices that address inequalities.

SEI will identify and analyse the factors that contribute to reduced water access for women and vulnerable groups. This may include inequalities related to water rights, land ownership, and decision-making. Policies that are environmentally sustainable and equitable require a better understanding of connections beyond the watershed, inclusive participatory approaches, and the water needs of ecosystems. WBB aims to deliver that knowledge and the tools to use it.

The regions

We are working in two pilot studies that face some of the largest water management challenges: Magdalena in Colombia and Mekong in South East Asia. The pilots will co-develop and test our new agenda to improve water security on the ground. We are also reflecting on work we have advanced in California, USA where many water security challenges are being addressed. These pilots build on the strong partnerships already in place with SEI and policymakers and stakeholders to improve water management.

**Magdalena River Basin:** The Magdalena River Basin, at 250,000 km², covers nearly one-quarter of Colombia’s national territory and provides sustenance to more than 35 million people who live in the basin (who make up 70% of Colombia’s population). The supply of critical resources – including not just water, but also food, biofuels and electricity – heavily depend on the river. Three-quarters of Colombia’s agricultural production is within the Magdalena River Basin.

**The Mekong:** This is one of the world’s longest and largest rivers, with a watershed covering 795,000 square kilometres (km²). It supports an area of high biodiversity and provides food security for over 70 million people in the Indo-Burma region. The river starts in China and flows out at the Vietnam Delta, winding through Myanmar, Lao PDR, Thailand, Cambodia, and Vietnam. Improving water security will not only support economic growth and reduce poverty, but also improve energy and food security.