



22 MAY 2013  
**INTERNATIONAL DAY  
FOR BIOLOGICAL DIVERSITY**  
**WATER & BIODIVERSITY**

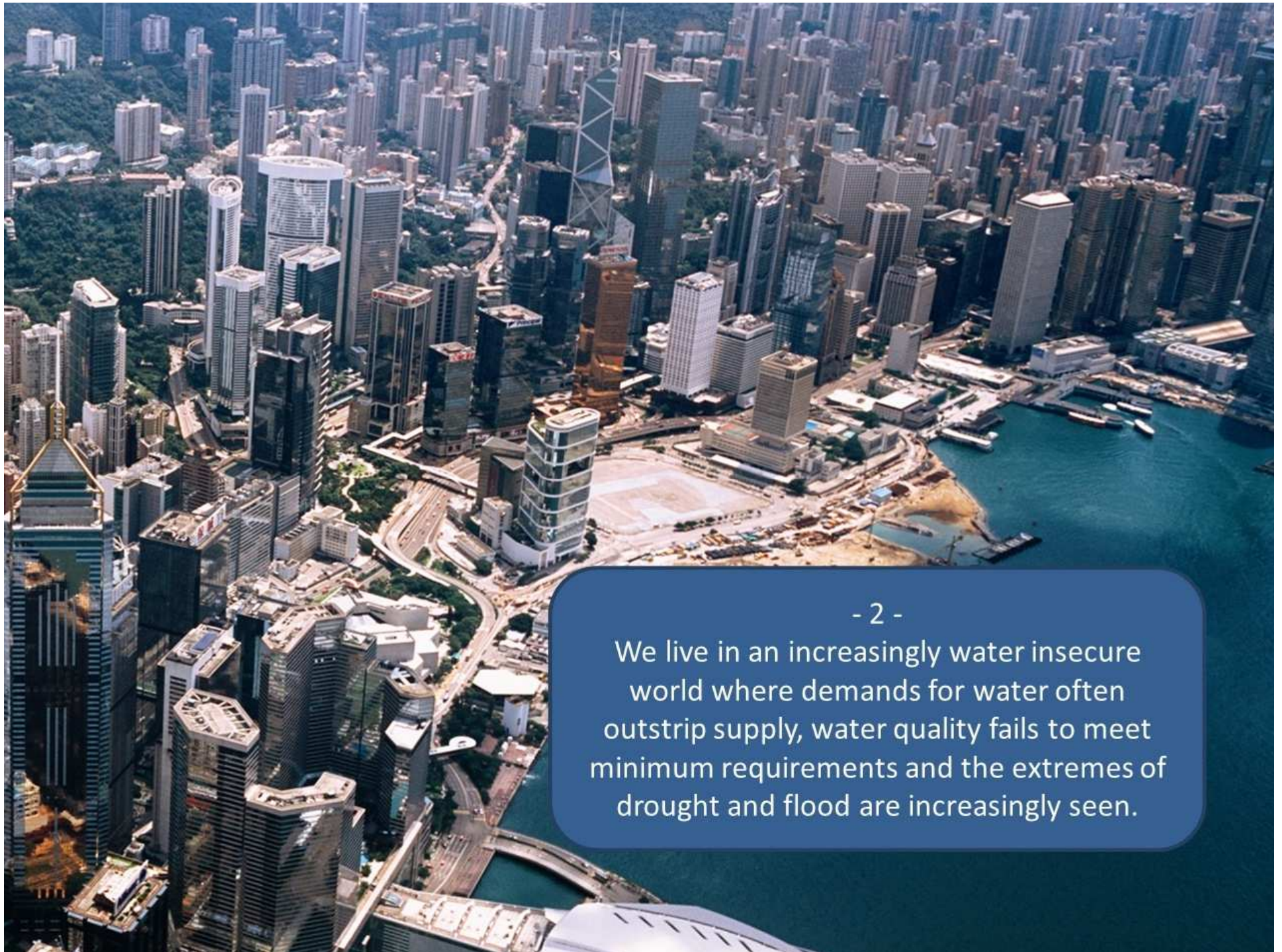


messages

- 1 -


Water is life and underpins human well-being, including food security, drinking water and sanitation, and most economic activities, as well underpinning ecosystem health and therefore biodiversity.





- 2 -

We live in an increasingly water insecure world where demands for water often outstrip supply, water quality fails to meet minimum requirements and the extremes of drought and flood are increasingly seen.

A close-up photograph of parched, cracked earth. The soil is light brown and has formed a complex network of deep, irregular cracks. In the lower-left quadrant, a small, vibrant green seedling with three leaves is growing out of a crack, providing a stark contrast to the dry, cracked ground.

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Water security is high on the political, public and business agendas; the World Economic Forum 2013 Global Risks report ranked water supply crises second only to major systemic financial failure, and ahead of food shortage crises, chronic fiscal imbalances and extreme volatility in energy and agricultural prices.

A photograph of a small, clear stream flowing through a dense, green forest. The water is shallow and reflects the surrounding foliage. The stream is surrounded by mossy rocks and lush vegetation, creating a serene and natural setting.

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Ecosystems regulate the availability of water, and its quality; ecosystem degradation increases water insecurity; ecosystem conservation and restoration therefore help us achieve water security; biodiversity underpins these benefits and is therefore one of the most visible and important contributions of biodiversity to human well-being and sustainable development.

A photograph of a wetland or marsh area. The foreground is dominated by a shallow, calm body of water reflecting the sky. The water is surrounded by lush, green and yellowish vegetation, including grasses and small plants. The background shows a continuation of this natural landscape under bright, natural light.

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Ecosystems are natural water infrastructure that can serve the same purpose as built or physical infrastructure, such as dams and water treatment plants; natural and built water infrastructure can be managed together to achieve sustainable outcomes, increasing efficiency, reducing costs and delivering significant co-benefits. These are win-win outcomes between environment and development.



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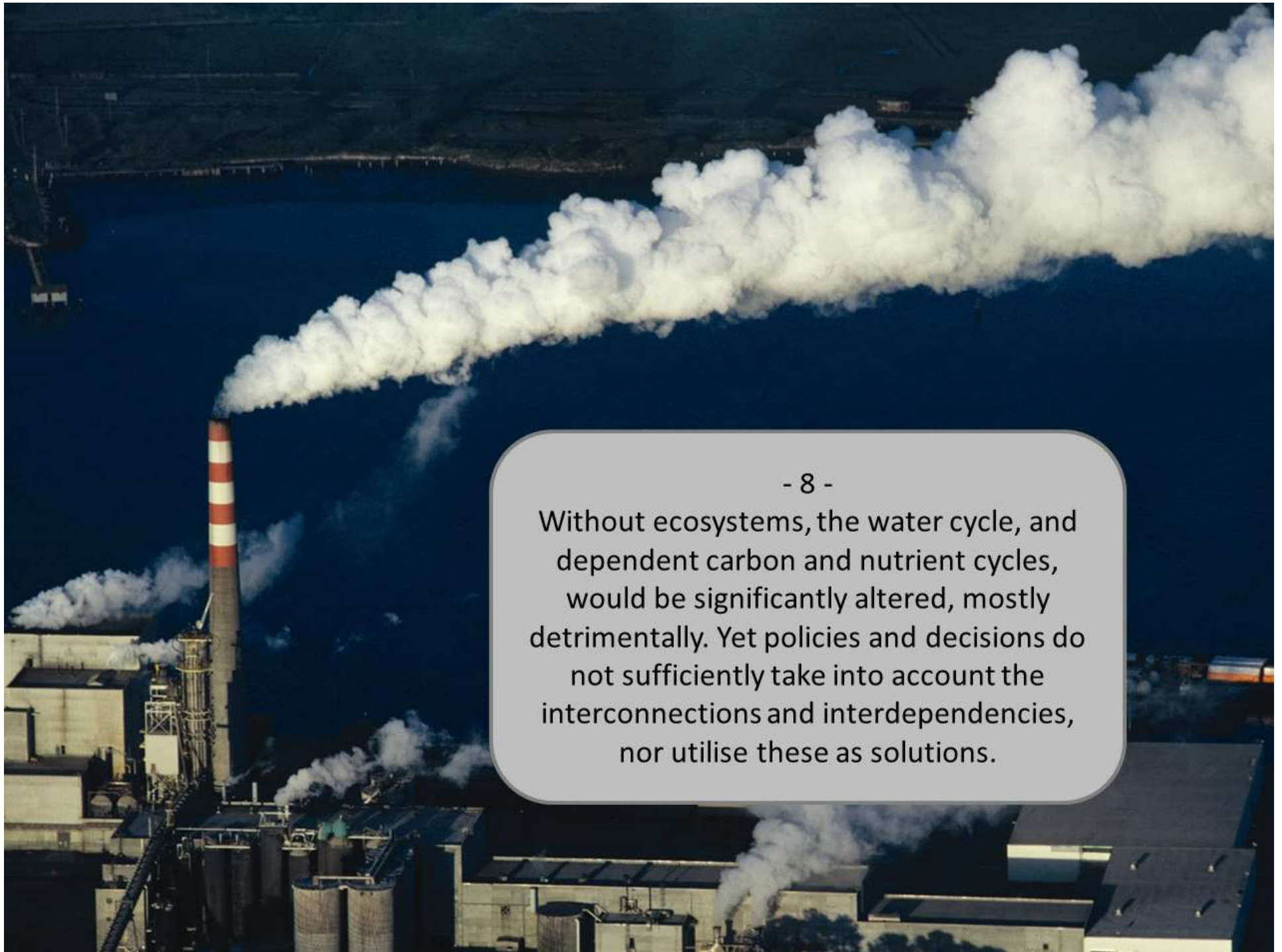
The use of natural infrastructure to manage water has a long history, spanning millennia, a strong evidence base, and is becoming increasingly widespread but yet to become mainstream to deliver its full potential.

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Ecosystem components that exert major influences on water include forests, grasslands, wetlands and soils; working together these can deliver water security benefits at local, regional and global scales.







- 8 -

Without ecosystems, the water cycle, and dependent carbon and nutrient cycles, would be significantly altered, mostly detrimentally. Yet policies and decisions do not sufficiently take into account the interconnections and interdependencies, nor utilise these as solutions.

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Water related benefits generally dominate the values that ecosystems provide, not just for wetlands but for most ecosystem types such as forests, grasslands and soils.



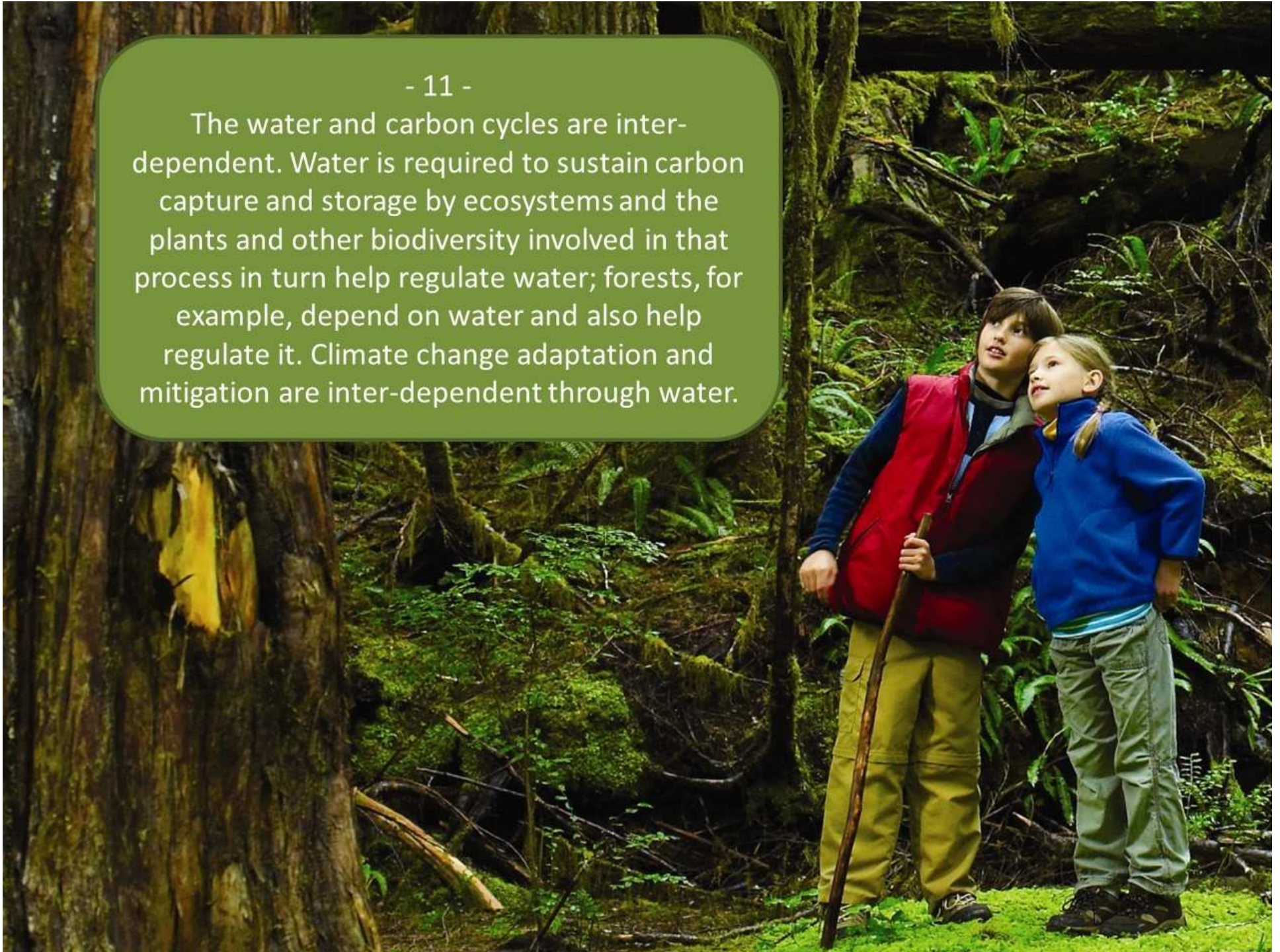
A woman with dark hair, seen from behind, stands in a heavy rain. She is wearing a vibrant, multi-colored pink and orange patterned dress with a matching sash. Her arms are outstretched to her sides, and she appears to be enjoying the rain. The background is a blurred, dark landscape with trees, suggesting an outdoor setting. The overall mood is serene and peaceful.

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The impacts of climate change occur primarily through changes in the water cycle and this influence on ecosystems. Ecosystem based approaches are therefore a primary response for adapting to climate change and this is largely about managing water.

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The water and carbon cycles are inter-dependent. Water is required to sustain carbon capture and storage by ecosystems and the plants and other biodiversity involved in that process in turn help regulate water; forests, for example, depend on water and also help regulate it. Climate change adaptation and mitigation are inter-dependent through water.



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Examples of significant opportunities to use ecosystems to manage water include: improving the health of soils and land cover in farming landscapes to simultaneously achieve water security for food security and reduce off-farm impacts, including reducing water use, pollution, erosion and landslides; integrating natural infrastructure approaches into urban water management to achieve sustainable and secure cities; wetlands, such as floodplains, coastal marshes and estuaries, to increase resilience to natural disasters; managed landscapes, such as forests, to sustain drinking water supplies; reducing the risks from, and severity of, floods and drought.



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Conserving or restoring ecosystems to manage water also delivers significant co-benefits. For example: wetlands can help regulate water but can also support significant fisheries; restoring soils can help achieve more productive agriculture and sustainable food security; forests provide timber and non-timber resources and habitat for pollinators and wildlife; improved landscapes provide significant recreational and cultural values. These benefits should be added to water-related benefits when considering returns on investments in water related infrastructure.





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