The role of green infrastructure investments in meeting global commitments

Source Water Protection



Source water

protection activity

Pro-

Description

Targeted land protection. Protecting targeted ecosystems, such as forests, grasslands or wetlands.

Revegetation. Restoring natural forest, grassland or other habitat through planting (direct seeding) or by enabling natural regeneration; includes pastureland reforestation.

Riparian restoration. Restoring natural habitat that is at the interface between land and water along the banks of a river or stream. These strips are sometimes referred to as riparian buffers.

Agricultural best management practices (BMPs). Changing agricultural land management to achieve multiple positive environmental outcomes.

Ranching best management practices (BMPs). Changing land management practices on ranchlands to achieve multiple positive environmental outcomes.

Fire risk management. Deploying management activities that reduce

forest fuels and thereby reduce the risk of catastrophic fire.







Wetland restoration and creation. Re-establishing the hydrology, plants and soils of former or degraded wetlands that have been drained, farmed or otherwise modified, or installing a new wetland to offset wetland losses or mimic natural wetland functions.

Road management. Deploying a range of avoidance and mitigation techniques that aim to reduce the environmental impacts of roads, including those impacts related to negative effects on soils, water, species and habitats.

Water Fund Model





Water Funds Framework



- Governance
- Funding
- Science
- Implementation

Water Funds in Operation



Currently 30 in operation, 40 more in design

Water funds provides a mechanism for delivery on multiple SDG goals



Also Using Other Global Commitments



Strategic Goal	Target	Possible Datasets
A. Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society	 By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems. 	Framing
B. Reduce the direct pressures on biodiversity and promote sustainable use	5. By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.	Forest loss over time
	7. By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.	Framing
	8. By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.	Reduction in N & P loading
C. To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity	11. By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.	Land use, protected areas, etc.
	12. By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.	IUCN species wholely within or intersecting with source watersheds
D. Enhance the benefits to all from biodiversity and ecosystem services	14. By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable	Framing
	15. By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.	Potential areas of restoration / reduction in carbon stock lost, standing carboin stock
E. Enhance implementation through participatory planning, knowledge management and capacity building	17. By 2015 each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan.	Framing
	18. By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels.	Framing
	19. By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.	Framing
	20. By 2020, at the latest, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources, and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization, should increase substantially from the current levels. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties.	\$ directed through water funds

Also Using Other Global Commitments



Achieving Multiple Benefits



Four of five cities (81 percent) can reduce sediment and nutrient pollution by a meaningful amount through forest protection, pastureland reforestation and agricultural BMPs as cover crops.



By taking care of the land in our urban source watersheds, we can get **16 percent** of the way to the 2050 **carbon reduction goal** under the Paris Agreement.



24% of urban source watersheds will likely experience an **increase in forest fires** and 83% are likely to experience an **increase in soil erosion**. Source water protection activities can reduce these and other climate change risks.



Source water protection activities help **maintain natural pollinators**. Without pollinators 2.6 Bill people in urban source watersheds would see **10% decrease in micronutrients** available through locally produced food and global **agricultural production's** value would decline by **5%**.



Restoring the lands in source watersheds can help **reduce global extinction of 52 species** and help reduce regional extinctions for **5,400 animal species**.

Program

Global to national perspectives

Jan Cassin, Forest Trends

Todd Gartner, World Resources Institute

Perrine Hamel, Stanford University

Brief Q&A

<u>Multi-local or watershed scale perspectives</u>

Ricardo Cepeda-Márquez, C40

Boniface Mwaniki, Kenya Water Resources Management Authority

Eric Soubeiran, Danone

Q&A and group discussion

Closing remarks





