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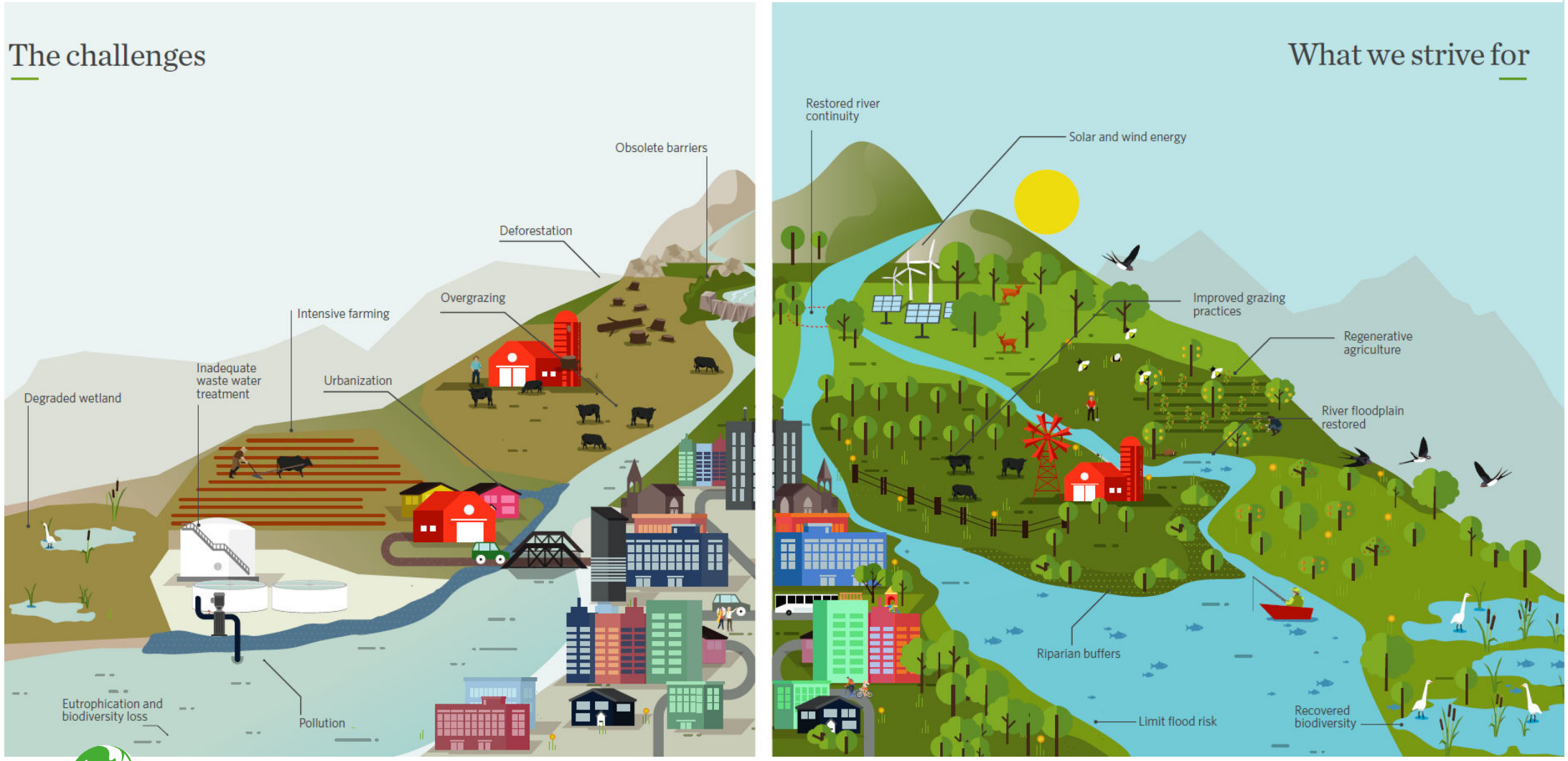
We envision that water systems can be managed to be regenerative and restorative to nature
我们设想可以对水系统进行管理，使其再生并恢复自然



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NBS to improve water quality: a global opportunity
NBS改善水质：全球机遇

How can nature help?

The lands around our water sources serve as vital infrastructure that can meaningfully improve water quality and quantity for cities worldwide

4/5

LARGE CITIES*

can improve water quality through upstream forest protection, reforestation and improved agricultural practices.**

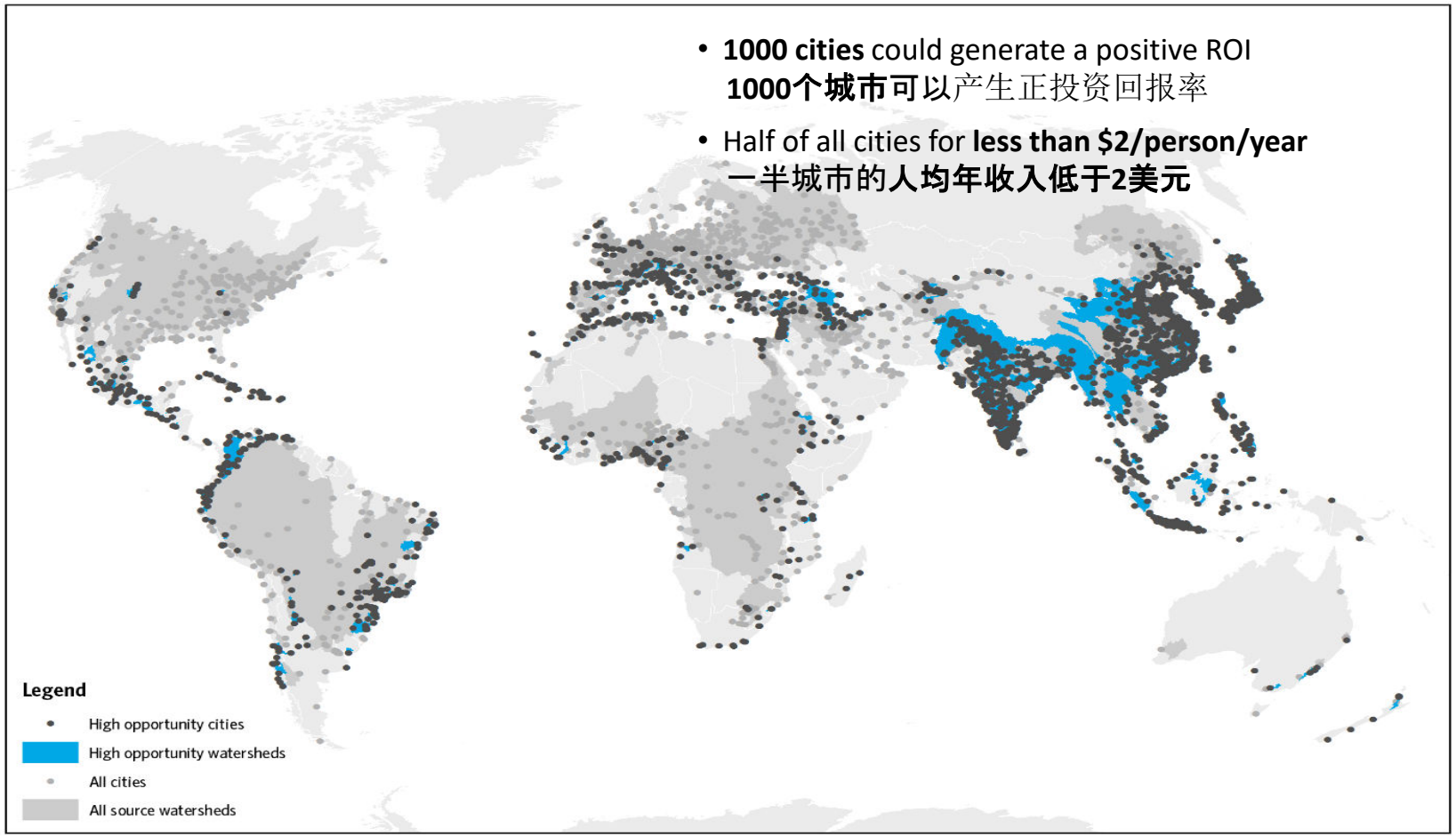
*Large cities includes the data set of 4,000 cities with populations greater than 100,000 that were part of The Nature Conservancy's research conducted for the Beyond the Source report. **This result represents only operating and maintenance costs.

1/6

LARGE CITIES*

can pay for natural solutions through savings in water treatment alone.**

*Large cities includes the data set of 4,000 cities with populations greater than 100,000 that were part of The Nature Conservancy's research conducted for the Beyond the Source report. **This result represents only operating and maintenance costs.



Source: TNC, Beyond the Source (2017)

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State of knowledge regarding the efficacy of NBS
关于NBS效用的知识状况

WATER SECURITY CHALLENGE	WATER AVAILABILITY		DISASTER RISK	WATER QUALITY		Potential for multiple co-benefits
Ecosystem benefit	Dry season flows	Groundwater recharge	Flood risk	Erosion & sediment	Nutrients & pollutants	
Protection						
1 *Targeted habitat protection*	✓	✓	✓✓	✓✓	✓	
Restoration						
2 *Revegetation*	✓	✓	✓✓	✓✓	✓	
3 *Riparian restoration*	✓	✓	✓	✓✓	✓✓	
4 *Wetlands restoration*	✓	✓	✓✓	✓	✓✓	
5 *Floodplain restoration*	✓	✓	✓✓	✓✓	✓	
Management						
6 *Agricultural BMPs*		✓		✓✓	✓✓	
7 *Ranching BMPs*	✓	✓		✓	✓	
8 *Forestry BMPs*	✓			✓	✓	
9 *Fire Management*			✓✓	✓✓	✓	
Created Habitats						
10 *Artificial wetlands*	✓	✓	✓	✓	✓✓	
11 *Sustainable Urban Drainage Systems (SuDS)*	✓✓	✓	✓✓	✓	✓✓	

LEGEND	LOW	MEDIUM	HIGH
Magnitude of water security benefit			
Depth of evidence		✓	✓✓
Potential for multiple co-benefits			

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Source: [TNC/AFD How to Guide]

Challenges 挑战

- Lack of clarity regarding costs and benefits of NBS relative to other investments
  与其他投资相比，NBS的成本和收益不明确
- Lack of ability to work beyond jurisdictional boundaries, or to create collective action
  缺乏超越管辖范围开展工作或采取集体行动的能力
- Lack of data and evidence of impact
  缺乏影响的数据和证据
- Lack of enabling policies or at least, the absence of policy barriers
  缺乏扶持政策，或者至少没有政策障碍

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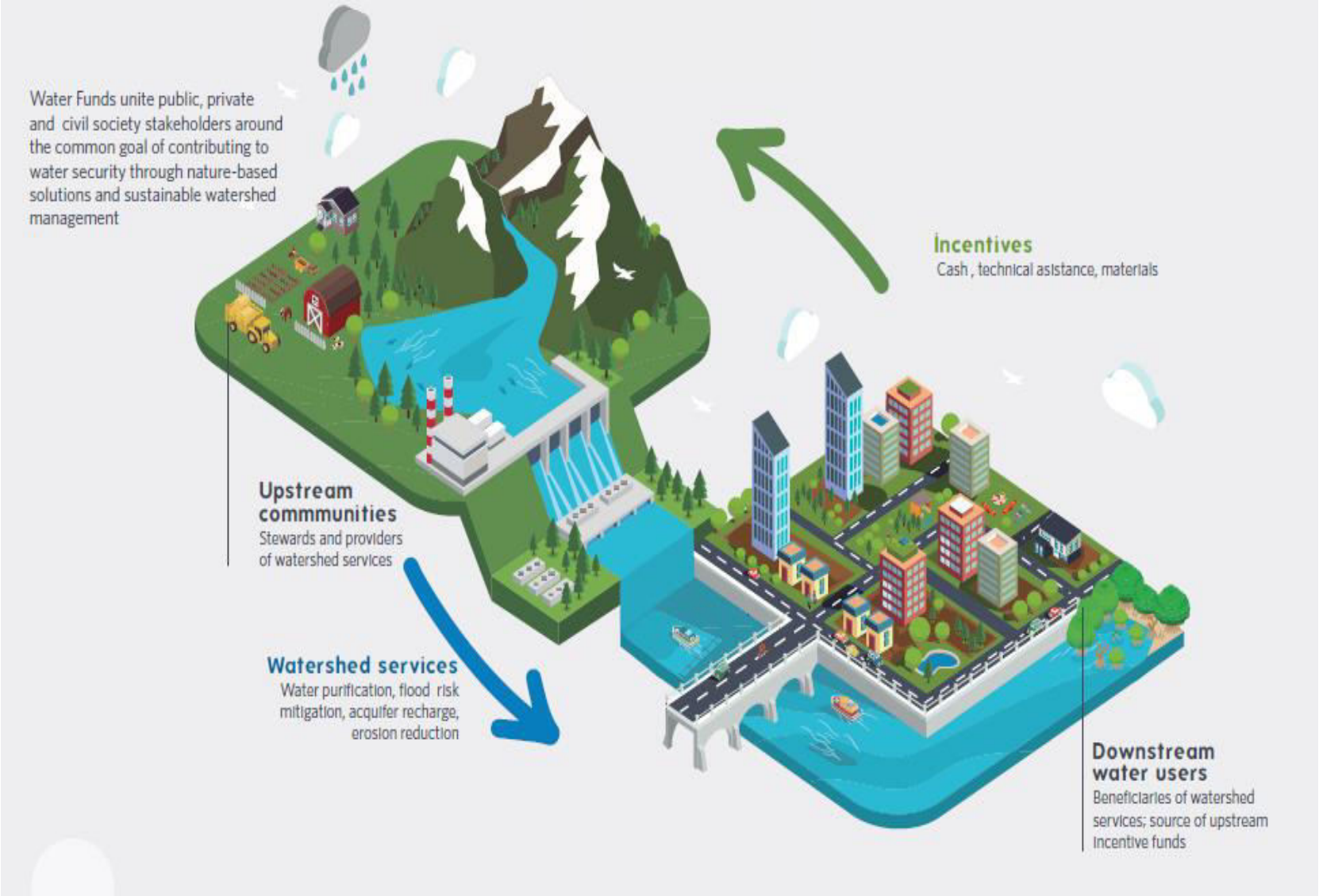
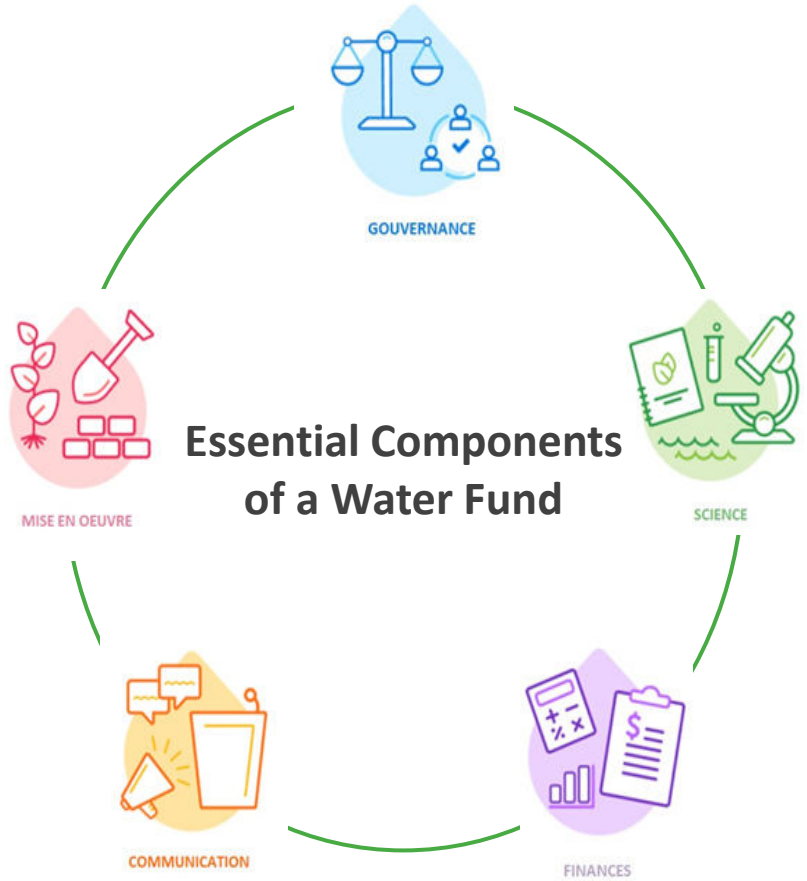
Source: TNC/AFD How to Guide

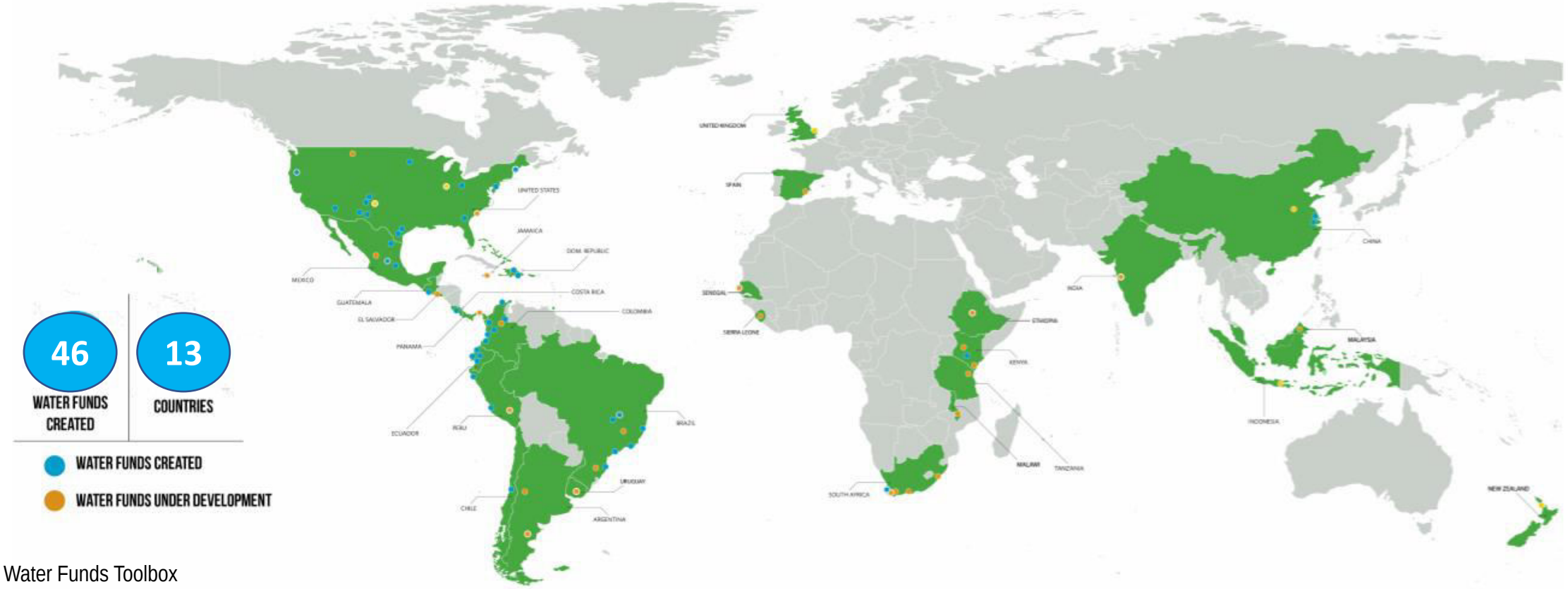
Water Funds are location specific mechanisms to deliver Nature-based Solutions





TNC water fund track record touches every region: over 215 partners to create 46 water funds in 13 countries.

Outcomes include over **530,000 hectares of land under improved management** and an estimated **100,000 people with increased place-based economic opportunity**. We have received **300+** requests pending to help invest in nature-based solutions for water security from corporations, governments, utilities and financiers.



Data source: Water Funds Toolbox

NBS in agriculture is the most cost-effective opportunity

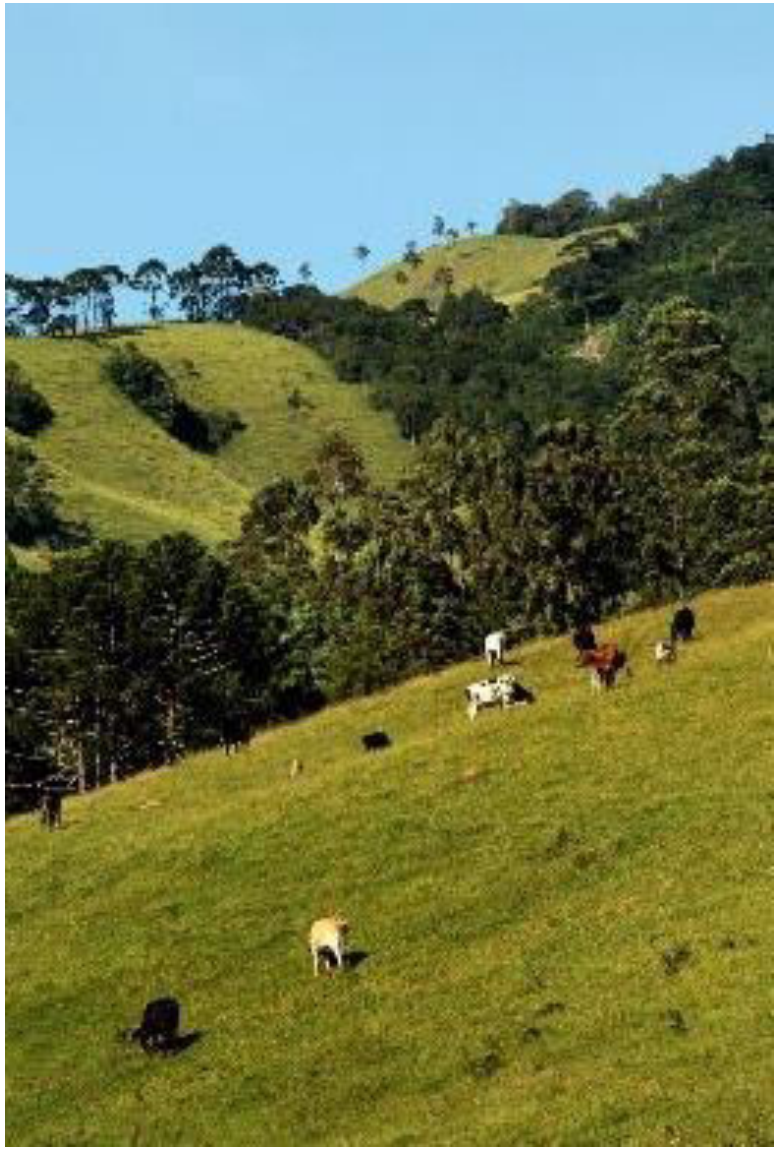
Nature Based Solutions in agriculture is the most cost-effective opportunity

US$3 million/year in increased agricultural yields for smallholders

27 million more liters of water flow into Nairobi each day

50% reduction in **sediment concentration** in rivers

Investment model: Regenerative Agriculture



Main ecosystem services

- Water quality
- Carbon sequestration
- Biodiversity
- Improved soil health

Beneficiaries

- Farmers and landowners
- Water and sewerage utilities
- Public authorities
- Downstream water users

Revenue streams & potential funding/financing solutions

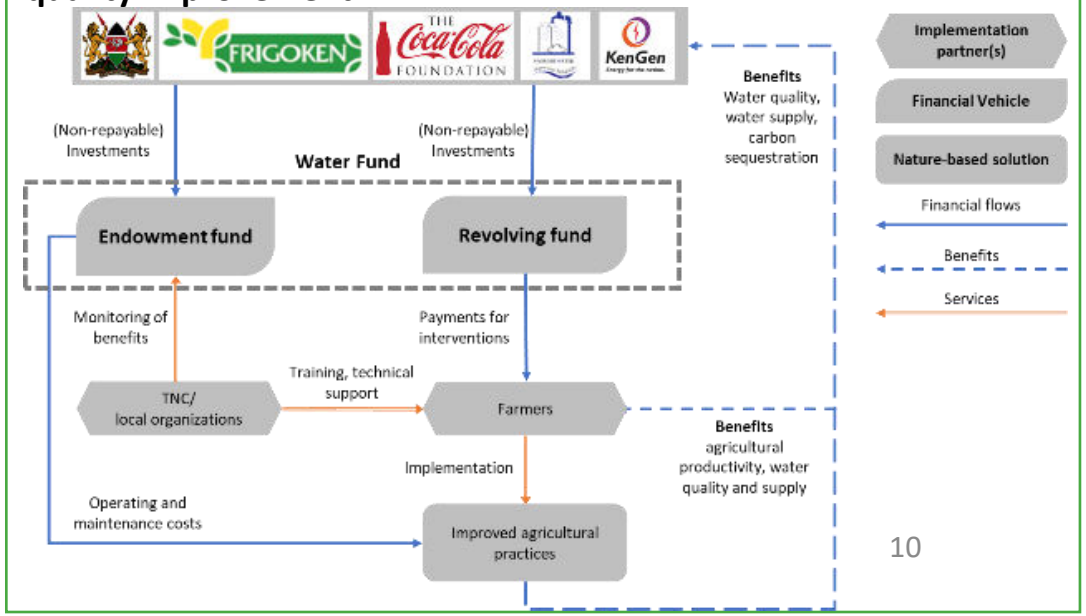
- Revenues from sale of nature-friendly agricultural products
- Operating cost savings
- PES (Carbon credits)
- Water funds
- Sustainability-linked loans

Case study: Nairobi Water Fund

Water fund implemented in the Tana river watershed to **secure sufficient water of adequate quality for Nairobi**. Tana river provides 95% of Nairobi's water and 50% of Kenya's electricity generation

The Tana WF supports farmers in adopting **sustainable agricultural practices** such as terracing, implementing grass strips, agroforestry methods **and establishing water pans to harvest rainwater**

4MUSD raised from fund members - **45,000 farmers involved 1.9 million m³ of /year of water to be harvested– 11% water quality improvement**



Thank you

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https://resilientwatersheds.nature.org/