ADAPTATION
BLENDED

PROJECT NAME	**Greater Cape Town Water Fund**[1]
COUNTRY	South Africa
SECTOR	Green Infrastructure, Water
DEVELOPMENT PARTNER(S)[2]	Steering committee private partners: Coca-Cola Peninsula Beverages, Remgro Limited, Nedbank, PepsiCo; AB-InBev Steering committee public and foundation partners: National departments of Environmental Affairs and Water & Sanitation, South African National Biodiversity Institute, Western Cape Government, CapeNature, City of Cape Town, WWF South Africa Other public partners: Resilient Cape Town, Stellenbosch University - CIB (Center for excellence for Invasion Biology), Water Research Commission Lead partner: The Nature Conservancy
BENEFICIARY MINISTRY/INSTITUTION[3]	Western Cape Water Supply System beneficiaries include the Cape Town metropolitan area, the agricultural sector, and smaller municipalities and communities. Its users involve multiple government departments at national, provincial, and municipal levels
INVESTOR(S) AND FUNDERS	Current investors and supporters include: PepsiCo, The CocaCola Foundation, Caterpillar Foundation, Levi Strauss & Co, Amazon, The Rupert Nature Foundation, Hans Hoheisen Charitable Trust, managed by Nedbank Private Wealth, The City of Cape Town, Allan & Gill Gray Philanthropies, and other private philanthropies
GUIDEBOOK TAXONOMY FINANCIAL SYSTEM ACTOR	Philanthropy and Impact Investors Public Balance Sheet
PROJECT/INVESTMENT AMOUNT[4]	Six year High Impact Investment of R372 million (~US$25.5 million) will yield 50 Billion liters; Full cost implementation (30 years) of R 760 million to yield 100 billion litres, a third of Cape Town's water needs
PROJECT OVERALL GOAL	Long-term water security in the Greater Cape Town Region, through the restoration and protection of water catchments
PROJECT OUTCOMES[5]	• Reclaimed water. An increase in sustainable water yield by removing invasive plants from aquifer and mountain catchments • More green jobs. More than500 green jobs have been created including a group of high-altitude rope technicians, trained to remove invasive plants in rugged and remote mountain terrain • Biodiversity protection. Removal of invasive alien plants from more than 55,000 hectares across seven targeted mountain catchments in a biodiversity hotspot, the Cape Floristic Region • Policy change. The City of Cape Town now adopts catchment protection through invasive plant clearing as part of its water augmentation programme

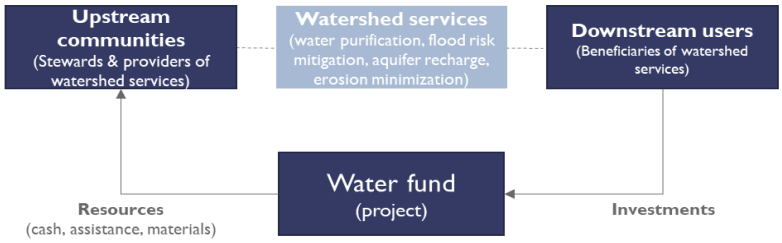
[1] This case was provided by CrossBoundary as a contribution to the Sharm El-Sheikh Guidebook for Just Financing
[2] Stafford et al. Greater Cape Town Water Fund Business Case, Assessing the return on investment for ecological infrastructure restoration The Nature Conservancy, 2019. https://www.nature.org/content/dam/tnc/nature/en/documents/GCTWF-Business-Case-April-2019.pdf
[3] Stafford et al. Greater Cape Town Water Fund Business Case, Assessing the return on investment for ecological infrastructure restoration The Nature Conservancy, 2019. https://www.nature.org/content/dam/tnc/nature/en/documents/GCTWF-Business-Case-April-2019.pdf
[4] The Nature Conservancy, 2020 GCTWF Factsheet, https://panorama.solutions/sites/default/files/gctwf_fact_sheet_september_2020_0.pdf
[5] The Nature Conservancy, 2020 GCTWF Factsheet, https://panorama.solutions/sites/default/files/gctwf_fact_sheet_september_2020_0.pdf

	• Research findings. A research project reveals that clearing invasive alien wattle yields an additional groundwater recharge of up to 830,000 litres per hectare, per year, for the Atlantis Aquifer • Innovative monitoring. An online Decision Support System facilitates the efficient coordination of partners in regard to planning, implementing activities and monitoring the impact of removing invasive plants on water • In South Africa's National Climate Change Response Policy (NCCRP), water leads the sectors of assigned priority in adaptation along with agriculture and commercial forestry, health, biodiversity and ecosystems, human settlements, and disaster risk reduction and management. Water is also a priority sector in South Africa's National Adaptation Plan (NAP) • South Africa's Integrated Resource Plan (IRP) includes water use as a key criterion for assessing longer-term electricity-sector investments
Alignment with Country Identified Climate Strategies, NDCs, etc. (if applicable)	• In South Africa's National Climate Change Response Policy (NCCRP), water leads the sectors of assigned priority in adaptation along with agriculture and commercial forestry, health, biodiversity and ecosystems, human settlements, and disaster risk reduction and management.[6] Water is also a priority sector in South Africa's National Adaptation Plan (NAP) • South Africa's Integrated Resource Plan (IRP) includes water use as a key criterion for assessing longer-term electricity-sector investments[7]
Contribution of the Project to the UN SDGs	SDG 3: Good health and well-being SDG 6: Clean water and sanitation SDG 11: Sustainable cities and communities SDG 13: Climate action SDG 15: Life on land
Socioeconomic Impact	• Improvement in water quality and quantity, and the consequent impact on health and well-being • Job creation, as restoration interventions are labor intensive • Savings on future water treatment costs can offset the costs of watershed conservation in Cape Town's supply and recharge areas
Environmental Impact (on climate mitigation and/or adaptation)	• Clearing of catchments and removal of alien species that degrade the ecosystem • Biodiversity impacts given the Western Cape's globally significant biodiversity
Enabling Environment (Supporting Policies)	Authorities that are committed to supporting decision-making with robust scientific analysis. The business case conducted previous to the implementation of the Water Fund, was a critical first step towards making the choice that yielded the best results for the landscape and the community in the medium and long term
Technical Assistance (If Provided)	Development partners and other sources helped fund multiple technical studies that informed the Fund's business case:[8] • Priority interventions for restoration of the Greater Cape Town's water supply catchment areas • Prioritization of wetlands for water security in priority dam catchments in the Western Cape Water Supply System • Preliminary economic analysis of wetland restoration • An analysis of legislation and policies supporting water resource protection in South Africa, with a specific focus on municipalities
Financing model/approach (ex: Blended finance)	Blended Finance and Public Private Partnership

[6] South Africa National Climate Change Adaptation Strategy. https://unfccc.int/sites/default/files/resource/South-Africa_NAP.pdf

[7] NDC Partnership. https://ndcpartnership.org/case-study/south-africa%E2%80%99s-integrated-resource-plan

[8] Stafford et al. Greater Cape Town Water Fund Business Case, Assessing the return on investment for ecological infrastructure restoration The Nature Conservancy, 2019. https://www.nature.org/content/dam/tnc/nature/en/documents/GCTWF-Business-Case-April-2019.pdf

Rationale for financing model/approach	Provide patient capital or subsidies for the implementation of green infrastructure projects. The Nature Conservancy and Water Funds for Africa published a business case for ecological infrastructure investment in 2018, detailing the value of landscape-level interventions to protect the water catchment areas in the region
Financial instrument(s) (loans, grants, bonds…. ETC.)	Fund that pools investment across multiple public and private sources, to provide patient capital or subsidies for the implementation of green infrastructure
Diagram of the financing structure[9]	 Note: The structure is a simplified illustration and does not represent a full depiction of all the actors involved in the transaction. Original diagram: 

Executive Summary

The Greater Cape Town Water Fund (GCTWF), business case was launched in November 2018 and promotes nature based solutions as a long-term, cost effective solution, focused on removing water-guzzling invasive pine, gum, and wattle tree species from about 55, 300 hectares. After a return-on-investment analysis, catchment restoration was shown to be substantially more cost-effective than alternative water augmentation solutions, including traditionally used grey infrastructure alternatives.

The source water sub-catchments feeding the Western Cape Water Supply System had been degraded by invasive alien plant species altering the soil ecology, increasing the frequency and severity of wildfires, and hindering the river flow and aquifer recharge. The Fund focuses on the restoration of seven priority sub-catchments, four priority wetlands, controlling invasive alien plants in remote mountains, and the restoration of the natural vegetation on the Atlantis Aquifer.

Actions enabled by the Fund have achieved improvement in water quality and quantity, and the consequent impact on health and well-being. Importantly the Fund has also provided significant co-benefits in terms of enhancing biodiversity, fostering employment (as restoration interventions are labor intensive), and other socio-economic indicators. It has also influenced policy change and contributed to advance the science on water catchments and groundwater recharge.

Analysis

[9] Peaks to People. Under "What is a Water Fund" question. https://peakstopeople.org/faqs/

What made this project successful? (Stakeholder involvement, innovation, addressing barriers to investment, etc.)[10]	**Innovative funding mechanism to coordinate diffuse beneficiaries**: Green infrastructure funds pool investment across multiple public and private sources, to provide patient capital or subsidies for the implementation of green infrastructure (e.g., water catchment restoration, mangrove coastal protection). In particular, water funds constitute a collective action model through which downstream water users (businesses, water utilities, and city governments) invest in upstream conservation initiatives that improve water quality and quantity. **Establishing partnerships:** The GCTWF brings stakeholders together through the establishment of a fund steering committee and expert working groups that can optimize resource management **Local capacity building:** The GCTWF invests in the development of teams that target women and young adults who deal with challenges on the ground, and seeks to transform these teams into small local businesses that provide green infrastructure services
To what extent is this model scalable?	• Water funds are scalable across geographies through a standardized water fund development process: feasibility, design, creation, operation, and maturity • The model can be adapted to other sectors where ecosystem services are quantifiable and accrue to large entities such as companies or municipalities • Looking forward, evolving ways of assigning monetary values to ecosystem services will allow alternative revenue streams to flow to these models, which in turn allows decision-makers to assess the relative benefits of green infrastructure alongside or instead of gray infrastructure in the water sector and beyond
To what extent is this model replicable in other countries/regions?	This model is being applied in diverse contexts around the world. The Nature Conservancy has established more than 40 water funds worldwide since 2001, including Rio de Janeiro, Brazil, and Upper Tana in Nairobi, Kenya
Constraints/ Drawbacks of Financing Model	One of the main drawbacks of green infrastructure funds, such as water funds, is related to the challenge of measuring ecosystem services. The complexities involved in ecosystems management, and the fact that externalities involved often go unpriced, make it harder for policymakers to gauge the real costs and benefits of the different potential interventions
Lessons Learnt	• Conduct a multidisciplinary return on investment analysis ex-ante. The GCTWF business case carefully assessed the return on investment of different water augmentation solutions. Ecological infrastructure restoration was shown to be substantially more cost-effective • Use a participatory approach to build long-lasting partnerships that combine different areas of expertise and brings different stakeholders together • Consider diversity of impacts beyond the water scarcity need that was being addressed, such as employment and biodiversity • Provide and continuously monitor impacts ex-post

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[10] The Nature Conservancy, 2020 GCTWF Factsheet, https://panorama.solutions/sites/default/files/gctwf_fact_sheet_september_2020_0.pdf