



Greater Cape Town Water Fund

Securing Water Through Nature

'Green' solutions cost five to 12 times less than 'grey' infrastructure and hold the potential to reclaim 100 billion litres of water by 2050.

The Challenges

WATER SCARCITY — In January 2018, Cape Town informed their 4 million residents that taps could run dry in 90 days. 'Day Zero,' a time designated for the world's largest drought-induced water catastrophe for a city, was averted after a 30 percent contraction in water use — brought about through water restrictions, water rate hikes, technical fixes, stopping agricultural water allocations, and citizen participation. Growing demand for water means that Cape Town needs an additional 300-350 million litres of water per day by 2021.

FUNDING — To meet this water demand, proposed 'grey' infrastructure projects aimed at augmenting the water supply for Cape Town have been prioritised. They include desalinating ocean water, drilling for groundwater, water reuse, and additional dam capacity. Conversely, targeted 'ecological infrastructure' solutions have received insufficient and intermittent funding.

CLIMATE CHANGE — Experts predict a future with decreased rainfall and higher temperatures for the Greater Cape Town region. 'Day Zero' remains a future possibility with dire consequences for the region's people, agriculture, and world-class tourism sector.

The Opportunities

RECLAIM LOST WATER — Nature-based solutions to the Greater Cape Town Region's water scarcity are sustainable, offer green jobs, reduce fire risk, and protect biodiversity. South Africa's Working for Water programme pioneered the removal of water-guzzling invasive plants as a nature-based solution to water scarcity in 1995. Against this background, TNC scientists have now pinpointed sub-catchments that must be cleared of invasive plants in order to reclaim the highest water yields.

NEW INVESTMENTS — Downstream water users, such as utilities and private sector companies that value water, benefit from investing in upstream restoration. Removing invasive plants upstream in remote mountainous terrain is harder and more expensive than in low lying, more accessible areas. However, clearing invasives at the source results in significantly higher water yields.

The Solution

INNOVATIVE FUNDING MECHANISM — The Nature Conservancy has established 41 water funds worldwide since 2001. Each water fund is a collective action model through which downstream water users — such as businesses, water utilities, and city governments — invest in upstream conservation initiatives that improve water quality and quantity for people, while restoring biodiversity.

GREATER CAPE TOWN WATER FUND (GCTWF) — Established by TNC in 2018, the GCTWF is Africa's second water fund. It follows the Upper Tana Nairobi Water Fund launched in 2015. The GCTWF is implementing activities to reclaim water losses and aims to sustain the gains in perpetuity for nature and the people of the region.

OUR MISSION

The mission of The Nature Conservancy is to conserve the lands and waters on which all life depends.

ABOUT TNC

- Established in 1951
- Works in 79 countries
- 1 million members
- Nearly 50 million hectares conserved
- 3 700 staff, including 400 scientists

TNC's AFRICA PROGRAM

TNC works in partnership with governments and local NGOs, sharing technical tools, skills, and resources, to increase the scale of their impact and implement solutions that preserve nature while improving people's lives.

TNC established the Africa Program in 2007, and today operates in nine countries across the continent.

PROJECT THEMES

- Water security
- Biodiversity protection
- Green jobs
- Partnerships



Our Approach

SECURE INVESTMENT — Attract investment of R372 million (US\$20M) over 30 years.

FORM PARTNERSHIPS — Bring stakeholders together by establishing a GCTWF steering committee and specialist working groups to manage limited resources efficiently.

BUILD LOCAL CAPACITY — Invest in the development of high-angle teams — targeting women and young adults — to work in rugged terrain and transform these teams into small local businesses that deliver green infrastructure services in the region.

RESTORE CATCHMENTS — Remove water-guzzling invasives such as pine, gum, and wattle from 5 000 ha across the Atlantis Aquifer region, and from 54 300 ha in seven rugged mountain catchments that are upstream from four dams serving the Greater Cape Town area. In the first six years, these actions will yield water gains of 55 billion litres per year or two months water supply for Cape Town. By 2050, these actions will yield 100 billion litres of water per year, equivalent to one-third of Cape Town's current annual supply.

PROTECT BIODIVERSITY — Remove invasive alien plants, thereby contributing to the restoration of a biodiversity hotspot where 70 percent of plants are found nowhere else on the planet.

Results So Far

RECLAIMED WATER — A sustainable yield of 4.8 billion litres of water per year has so far been achieved by removing invasive plants from aquifer and mountain catchments.

MORE GREEN JOBS — 40 high-altitude rope technicians, trained to remove invasive plants in rugged and remote mountain terrain, comprise nearly half of the 100 green jobs created to date.

BIODIVERSITY PROTECTION — Invasive alien plants have been removed from 10 000 hectares across seven targeted mountain catchments, and the Atlantis Aquifer, in a biodiversity-rich biosphere containing 9 500 species — known as the Cape Floral Kingdom.

POLICY CHANGE — Supported by science, the City of Cape Town adopts catchment protection through invasive plant clearing as part of its water augmentation programme.

RESEARCH FINDINGS — A sap flow 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. Monitoring impacts on paired surface water catchments is underway.

INNOVATIVE MONITORING — An online Decision Support System facilitates the efficient coordination of partners to plan, implement activities and monitor the impact of removing invasive plants on water.

ABOUT THE PROJECT

TARGET AREA — 54 300 hectares in seven rugged mountainous sub-catchments and 5 000 hectares across the Atlantis Aquifer

FUNDING — A 30-year target to invest R372M (US\$20M) to yield 100 billion litres, one third of Cape Town's water needs

CONSERVATION FOCUS — Protecting a biodiversity hotspot with three times more plant species per area than tropical rainforests

GENEROUS SUPPORTERS

PepsiCo, The Coca-Cola Foundation, Caterpillar Foundation, Levi Strauss & Co, Amazon, The Rupert Nature Foundation, Hans Hoheisen Charitable Trust, managed by Nedbank Private Wealth, and private philanthropy.

STEERING COMMITTEE

Coca-Cola Peninsula Beverages, Remgro Limited, Nedbank, PepsiCo, National departments of Environmental Affairs and Water & Sanitation, South African National Biodiversity Institute, Western Cape Government, CapeNature, City of Cape Town, WWF South Africa.

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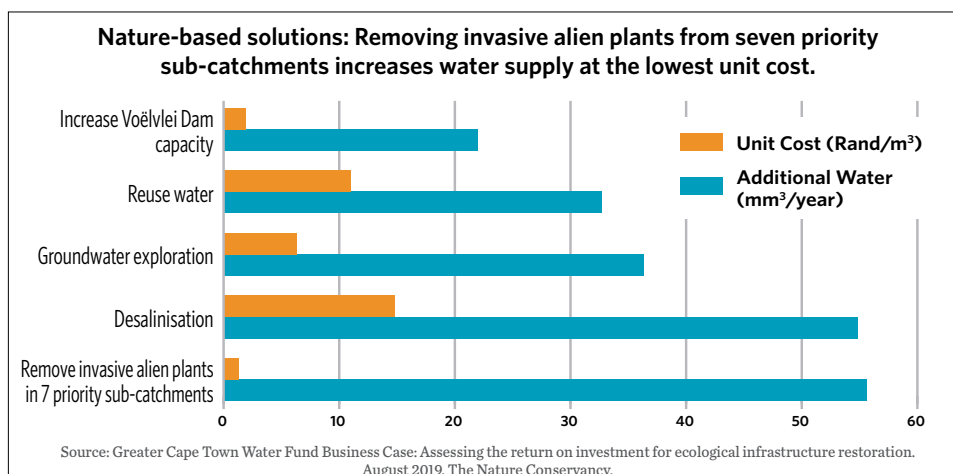


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