

An aerial photograph of a vast savanna landscape. A winding river flows through the center-right of the frame, creating several meanders. The surrounding land is covered in dry, golden-brown grass and scattered trees. In the distance, a flat horizon line separates the land from a blue sky with light, wispy clouds.

IW LEARN TRAINING WORKSHOP

Water Funds

Led by The Nature Conservancy

Gaborone, May 31, 2019



Water Funds: An overview to the training

Colin Apse • Freshwater Conservation Director, Africa • The Nature Conservancy

Water Funds: A one day introduction

Quick overview of Agenda

Fri 31st May, 2019



Session	Start	Agenda Item	Lead
	09:00	Welcome and Overview	
1a	09:15	Session 1: Overview of Water Funds Model for Source Water Protection	
1b		Session 1b: Scope, Impact & Key Steps Group formation	
1c	10:25	Q&A and Overview	
2a	10:40	Session 2: What are the key steps in determining whether a Water Fund is appropriate and, if so, putting it in place? (part one)	
	11:00	Morning Coffee	
2b	11:30	Session 2b: Key feasibility Steps (cont.)	
2c		Session 2c: Action Planning & how it works	
	12:00	Groupwork: Scoping the area of action	
	12:30	Lunch	

	12:30	Lunch	0
	13:30	Food for thought - Collaboration in Practice	
3a	14:05	Session 3: How would a 'typical' Water Funds Model be adapted for IW Projects and Large River Basins? Key considerations and case studies, including:	
3b		Session 3b: Tana Basin as an example	
3c		Session 3c: Cubango-Okavango as an example	
3d	14:55	Plenary Q&A	
	15:10	Group Work	
	15:30	Afternoon Break	0
4a	16:00	Session 4: Taking it home – working through examples. Participants engage in a participatory exercise to see what has been learned and how it can be applied to their own geography.	
4b		Session 4b: Key questions for an Action Planning Phase	
4c		Session 4c: Critical dialogue between groups	
5a	16:45	Session 5: Next Steps and Further Resources	
	17:00	End of day	0

Room: to be announced



Water Funds Online Training: Introduction and Feasibility Phase



Team Water
May 20 · 8 min read · Unlisted

The Water Funds online course provides a personalized online course room that you can tap into to further your understanding of the concept of a water fund and how it works.



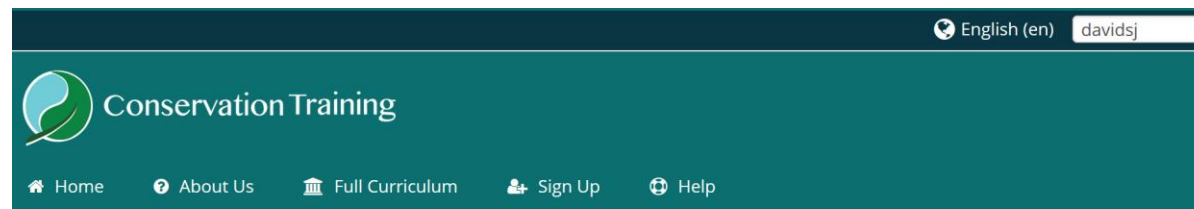
Water funds are conservation financing mechanisms that gather investments from water users and direct the funding toward the protection and restoration of key lands upstream that filter and regulate water supply

The Water Funds online course-room—once you have an [account](#)—provides you with self-study materials and exercises aimed at helping you learn about Water Funds through an **Introduction** and then getting started with the first step—**Feasibility**.

The learning materials include interactive online lessons, PDFs, resumes of key points and quizzes you can do to test your knowledge. There is also a Quick Start Guide and email address for support. Those who are particularly motivated, if they do enough modules and pass the few tests, can gain a certificate as proof of training.

> [Introduction to Water Funds](#)

- [Course 1: What is Water Security? \(15 minutes\)](#)



[Home](#) > [Curriculum](#) > [Water Funds](#) > [Water Funds: Introduction and Feasibility Phase](#) > [Enrolment options](#)

Enrolment options

[Water Funds: Introduction and Feasibility Phase](#)



Welcome to the Water Funds course. This online course room provides you with exercises aimed at helping you learn about Water Funds and getting started with Feasibility.

Duration: 5 hours

Self enrolment (Student)



Water Funds: An Introduction

David Schaub-Jones • Water Funds Programme Manager • The Nature Conservancy

SESSION OVERVIEW

- An introduction to Water Security and Source Water Protection
- The history of the Water Fund model

WATER SECURITY: A GROWING CHALLENGE

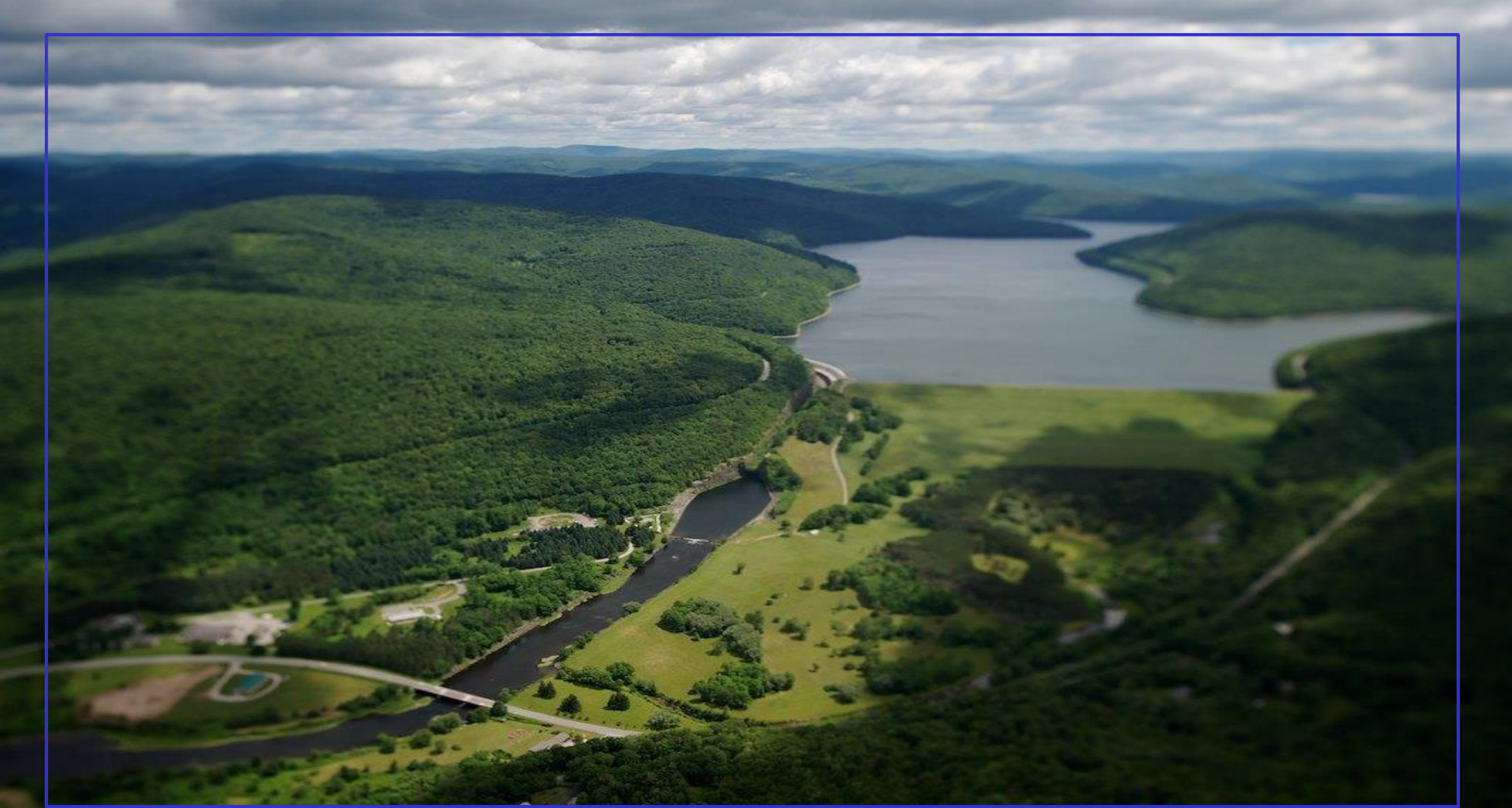
Societies can enjoy water security when they comprehensively and successfully manage their water resources and services to meet the needs of each dimension of water security:



Water is an essential element for Sustainable Development due to its close relation to a range of diverse challenges
The Future We Want, UN, Rio +20

PRESERVING ECOSYSTEM INTEGRITY





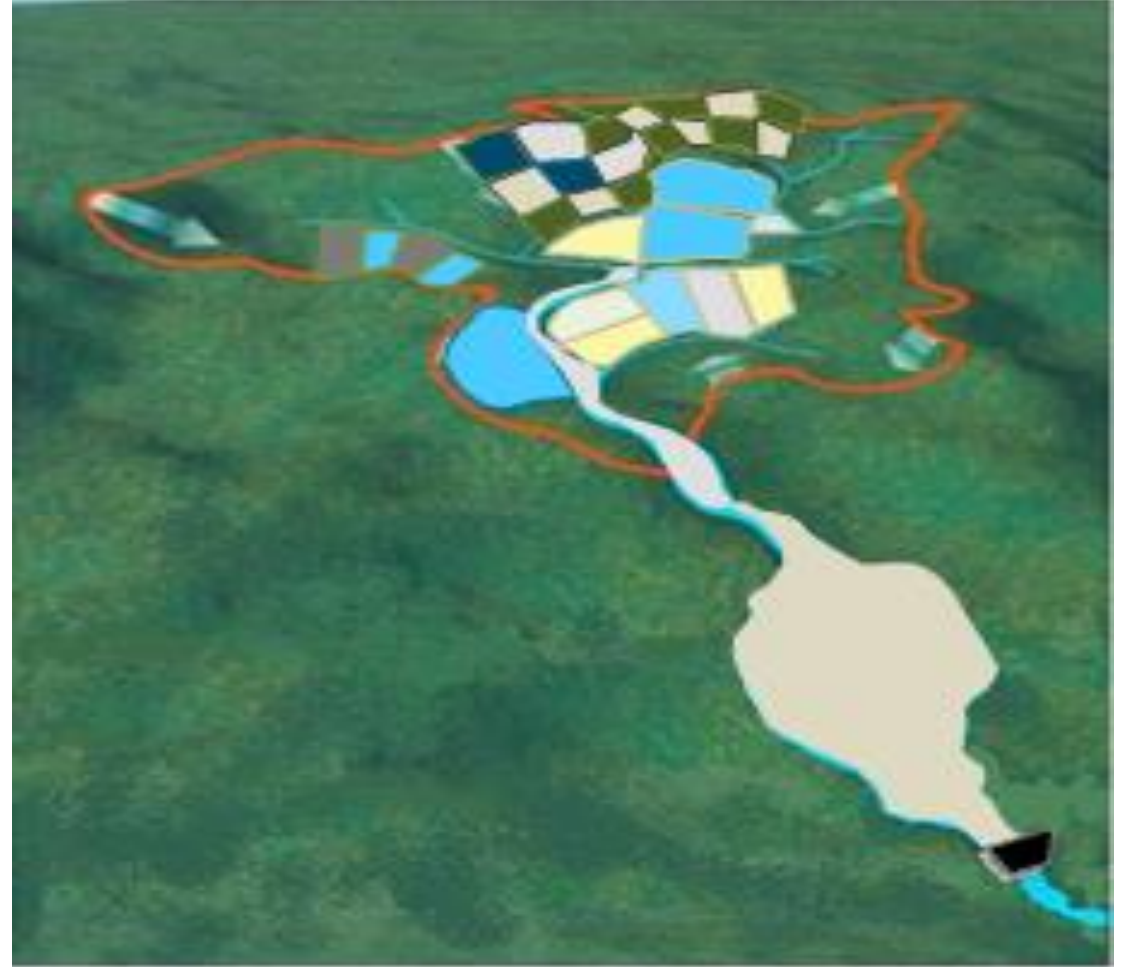
Pepacton Reservoir © Josh Marinelli



“The essence of watershed management—which is the process of organizing and guiding land and natural resource use to reflect the competing needs and priorities of all stakeholders—is to prevent contaminants from reaching water resources.

With careful planning and communication, water quality can be protected while still serving multiple priorities.”

PROTECTING WHERE OUR WATER COMES FROM



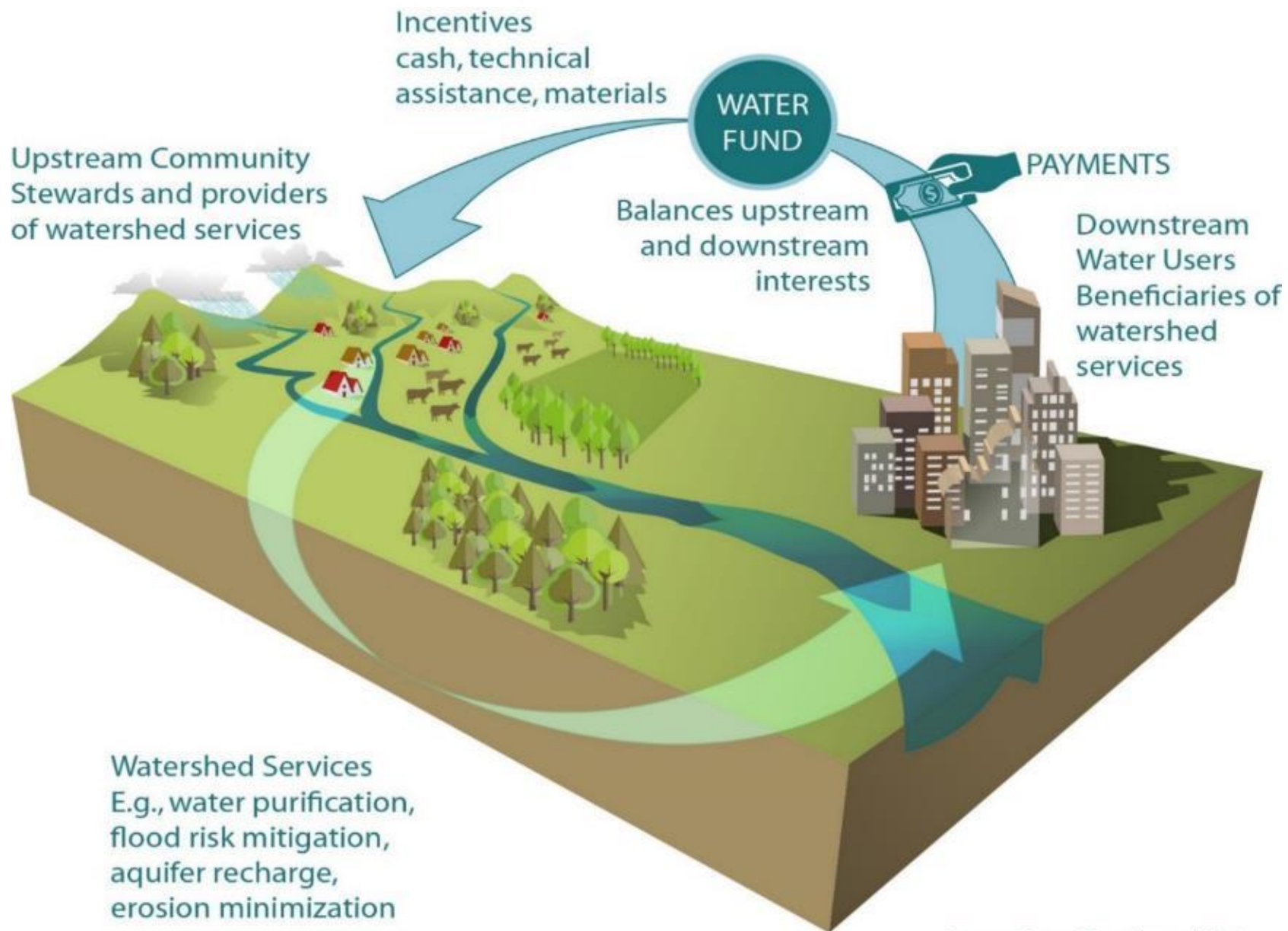
Sustainable watershed management requires leadership in overcoming barriers to effective governance

Effective governance of watersheds



BARRIERS





Source: Forest Trends; modified

TNC is Involved in Nearly 60 Water Funds around the World



The Nature Conservancy and Partners analyzed 4,000 cities around the world to demonstrate the health, climate and biodiversity benefits of SWP

4/5 cities could meaningfully reduce sediment and nutrient pollution in their drinking water supplies through source water protection



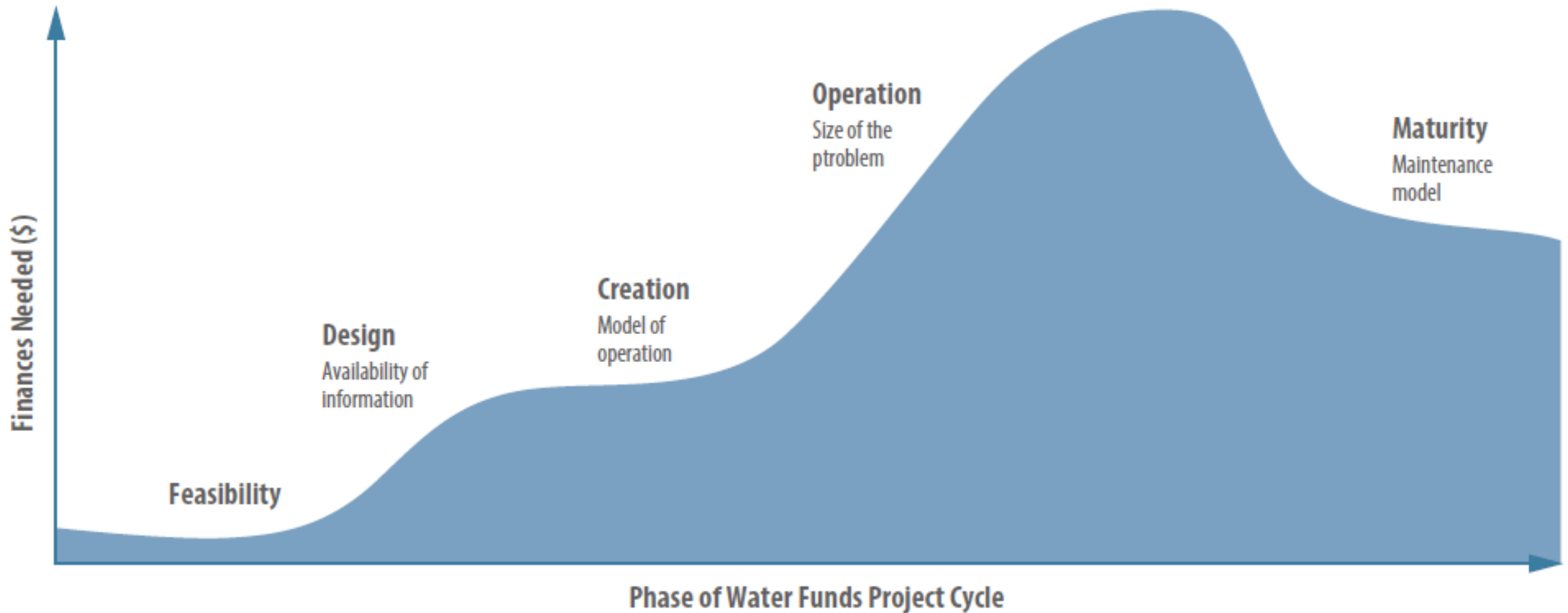
Learn more: [nature.org/beyondthesource](https://www.nature.org/beyondthesource)

Water Funds Components

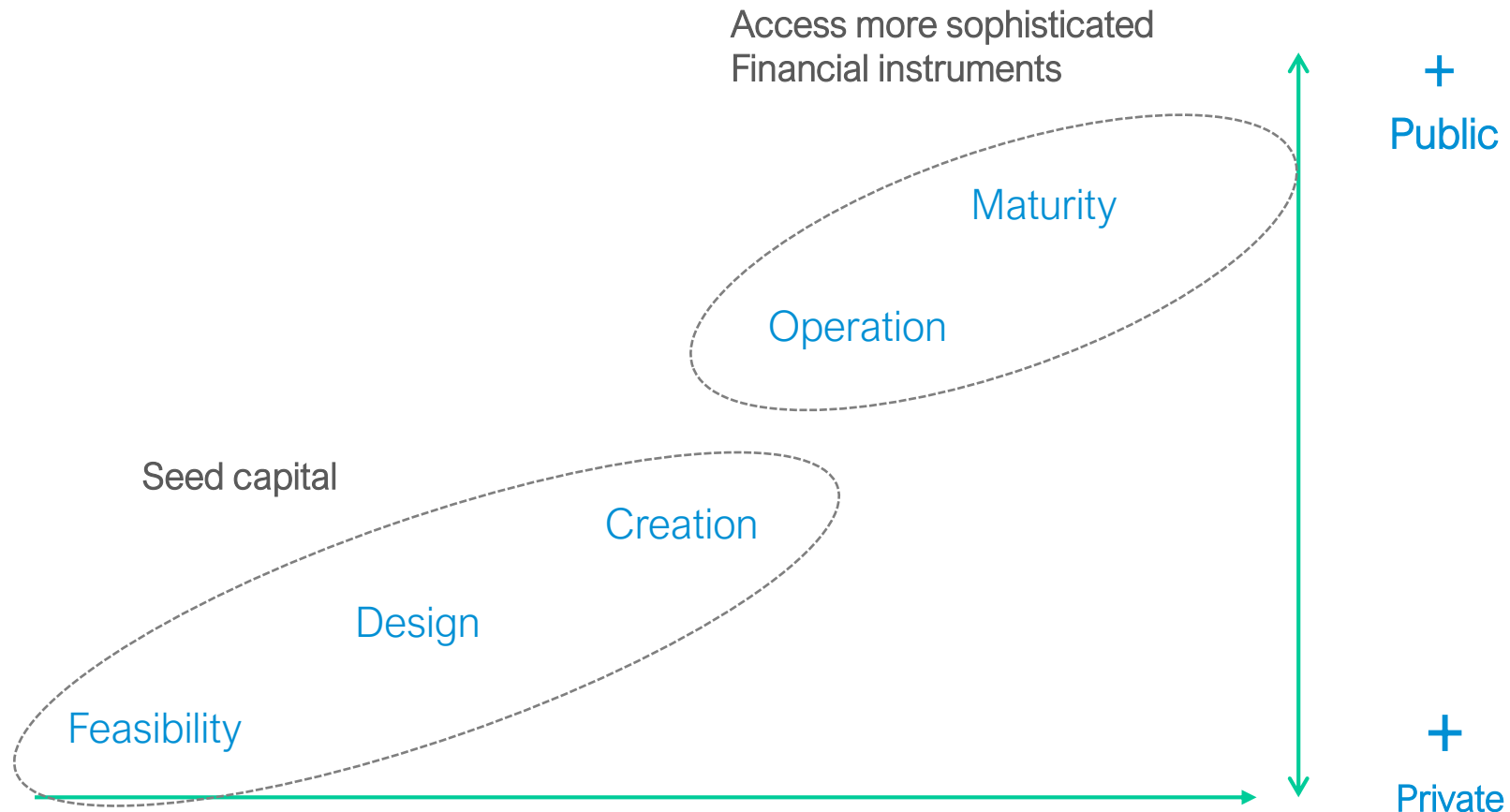


WATER FUNDS PROJECT CYCLE

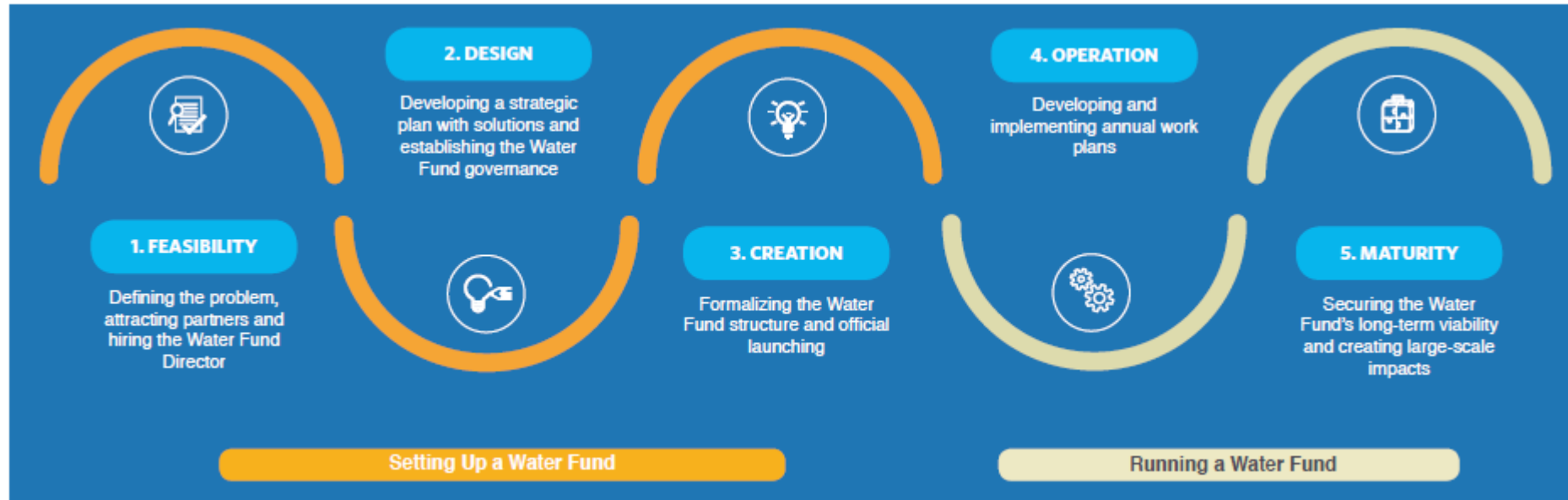
Process Overview



FINANCIAL STRATEGIES



WATER FUNDS PROJECT CYCLE



Feasibility Overview

- [Step 1.1](#) Eligibility Screening Checklist
- [Step 1.2](#) Situation Analysis Report
- [Step 1.3](#) Decision Support Document
- [Step 1.4](#) Gain Formal Commitments & Hire 20 Director

Design Overview

- [Step 2.1](#) Formalize WF Board & Develop Charter
- [Step 2.2](#) Start Creation of Legal Mechanism
- [Step 2.3](#) Update Situation Analysis
- [Step 2.4](#) Water Fund Strategic Plan
- [Step 2.5](#) Design Studies
 - Portfolio of Interventions
 - Social Impact Assessment
 - Business Case
 - Long-term Finance
- [Step 2.6](#) Monitoring & Evaluation
- [Step 2.7](#) Pilot Projects

Creation Overview

- [Step 3.1](#) WF Legal Mechanism Established
- [Step 3.2](#) Create first Annual Operating Plan
- [Step 3.3](#) Operational Management Readiness
- [Step 3.4](#) Launch Event

Operation Overview

- [Step 4.1](#) Annual Operating Plan
- [Step 4.2](#) Reporting
- [Step 4.3](#) Adaptive Management

Maturity Overview

Maturity Criteria

- ✓ Significant % of long-term financing committed
- ✓ Routine reporting that documents WF's ongoing impact
- ✓ Influence demonstrated
- ✓ Positive public perception demonstrated



Scope and Impact of Water Funds

Colin Apse • Freshwater Conservation Director, Africa • The Nature Conservancy

SESSION OVERVIEW

- What sort of scope and impact can be achieved?
- What are the key steps to putting a Water Fund in place?
- What happens once a Water Fund is established?
- How this relates to the broader workshop themes and the interests of this group



The Nature
Conservancy



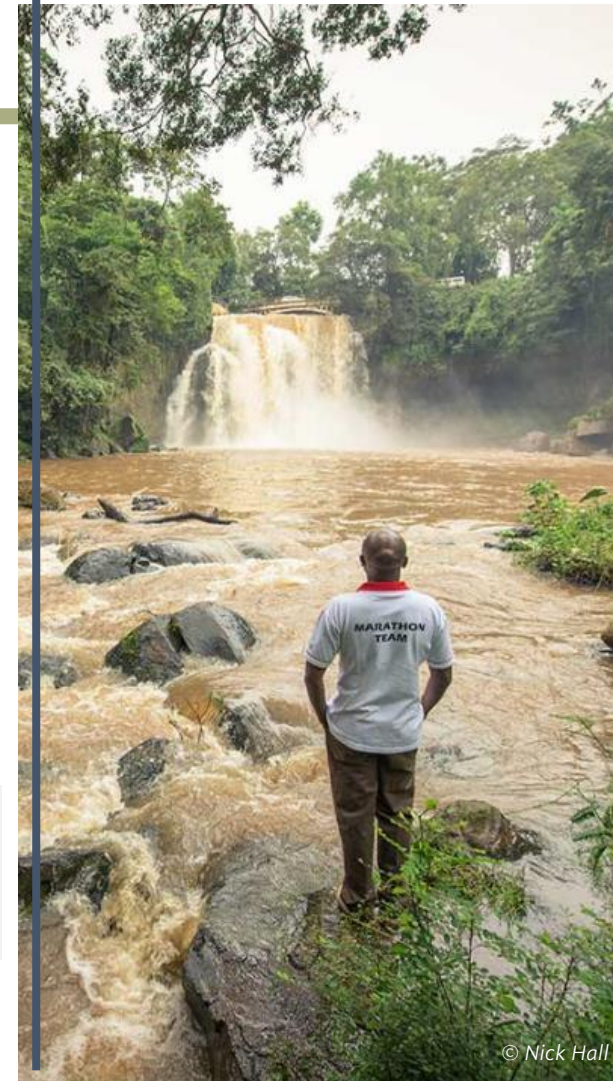
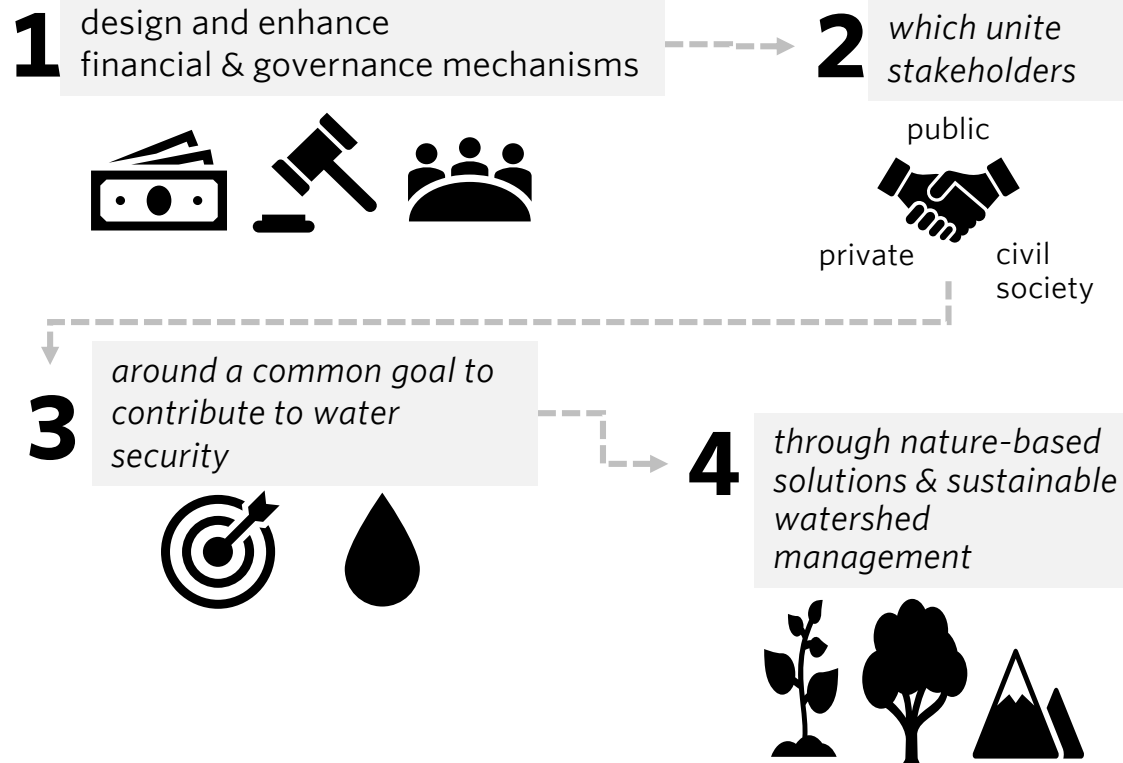
WATER FUNDS

Field Guide | 2018



What is a Water Fund?

Water Funds are organizations that:



Source Water Situation Analysis

- By 2050, 2X more people in Africa, mainly in cities
- Poor land management in source areas is the challenge, particularly deforestation & expanding agriculture
- *Source water protection (SWP)* = targeted land protection and restoration = green infrastructure implementation
- SWP's benefits biodiversity & rural development



Source Water Situation Analysis

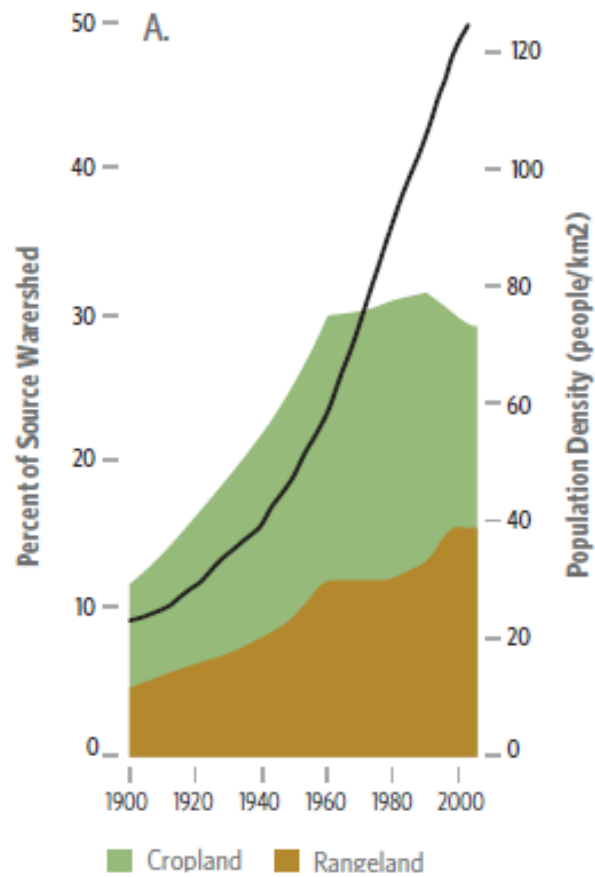
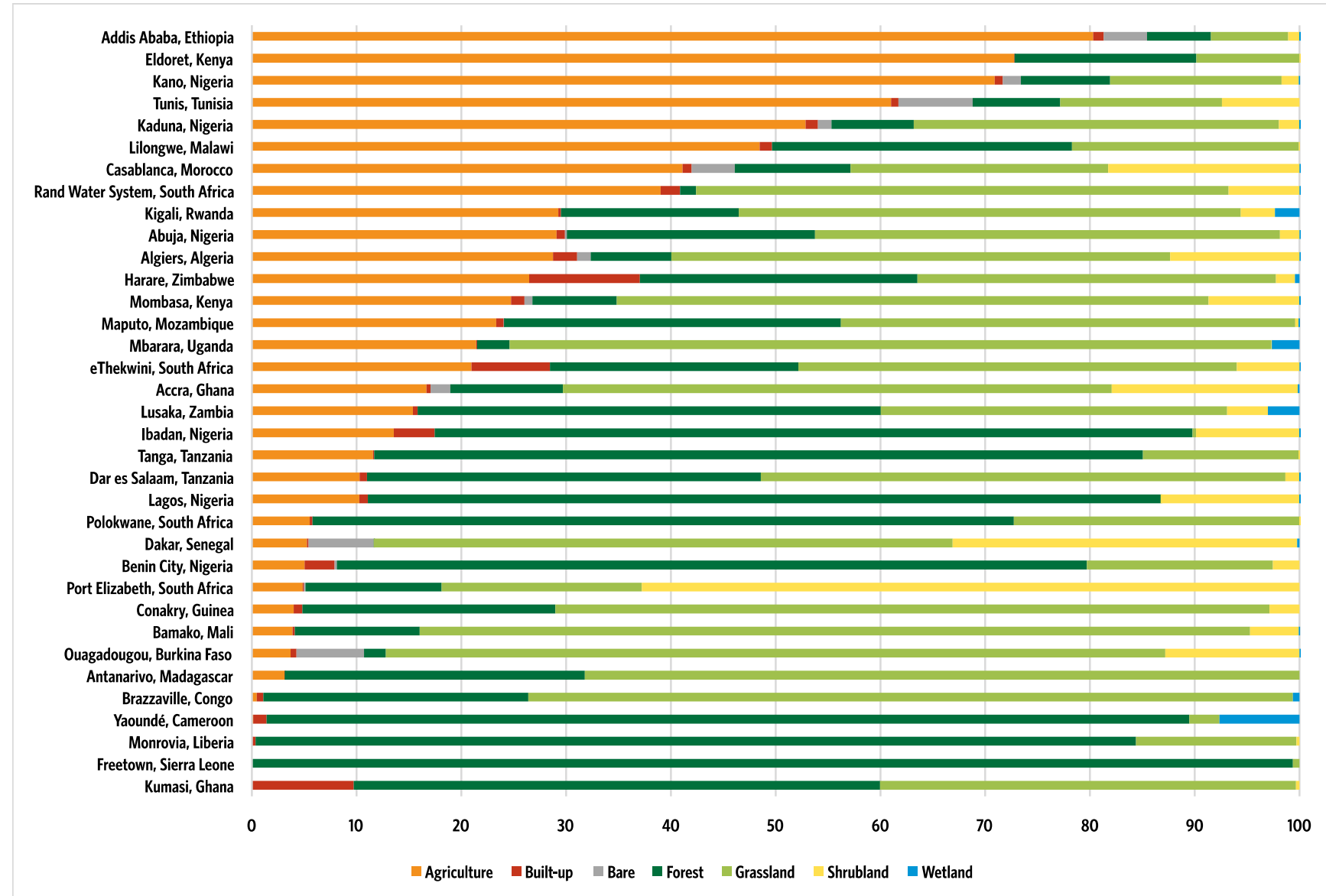


Figure 3. Watershed Degradation Over Time
Trends over time in watershed degradation in urban source watersheds, median cropland and rangeland coverage, as well as population density.



AREAS OF ACTION COMMON TO ALL WATER FUNDS



GOVERNANCE



SCIENCE



FINANCE



IMPLEMENTATION



COMMUNICATION

Source Water Protection Activities

Healthy Lands, Healthy Water

Natural infrastructure as a path to clean water

The lands around our water sources serve as vital infrastructure that can meaningfully improve water quality and quantity for cities around the world. Beyond protecting our water sources, forests, grasslands, wetlands and improved agricultural practices can help reduce our carbon footprint, maintain critical ecosystems and build healthier, more resilient communities in the face of climate change.



Targeted land protection



Revegetation



Riparian restoration



Agricultural land management



Ranching land management



Fire risk management



Wetland restoration/creation



Road management

For more than 15 years, water funds have enabled downstream water users to invest in upstream habitat protection and land management to improve water quality and quantity.

Learn more at [nature.org/beyondthesource](https://www.nature.org/beyondthesource)

Source Water Protection Impacts



Water security. Maintaining or improving water quality and dry season flows.



Climate change mitigation. Avoiding greenhouse gas emissions and increasing carbon sequestration.



Climate change adaptation. Using nature to mitigate climate change impacts and build resilient communities.



Human health and well-being. Supporting and improving physical and mental health, food security, livelihoods and social cohesion.



Biodiversity conservation. Protecting and improving the status of terrestrial and freshwater species and the ecosystems in which they live.



Targeted land protection



Revegetation



Riparian restoration



Agricultural land management



Ranching land management



Fire risk management



Wetland restoration/creation



Road management

Water Security is at the heart of the UN Sustainable Development Goals



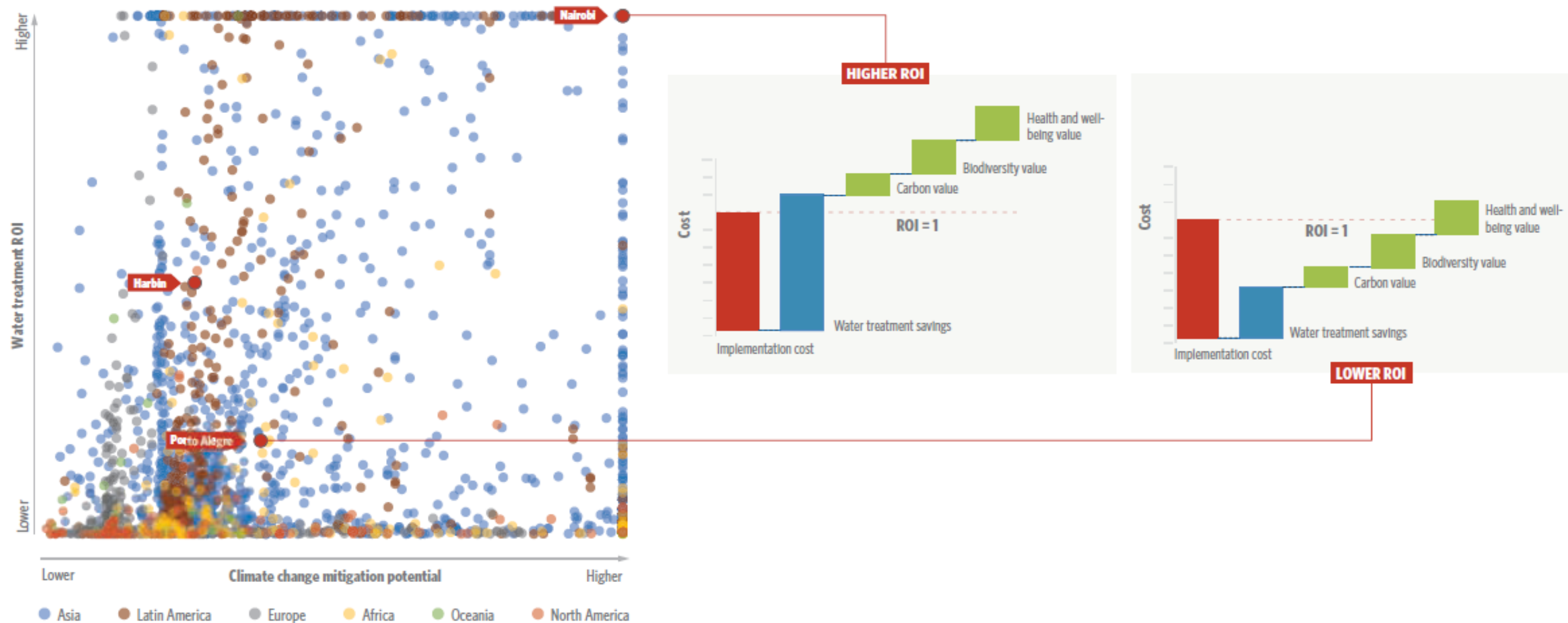


Figure 6 Left: Comparison of indicators of potential co-benefit value (horizontal axis) versus relative water treatment ROI (vertical axis). Climate change mitigation potential estimated from annual sequestration potential from reforestation and cover crops as implemented to reach a 10 percent reduction in sediment or nutrients. **Middle:** Illustrative graph showing cities with a positive ROI based solely on water treatment savings. **Right:** Illustrative graph showing cities whose ROI could be positive with the addition of co-benefit values.

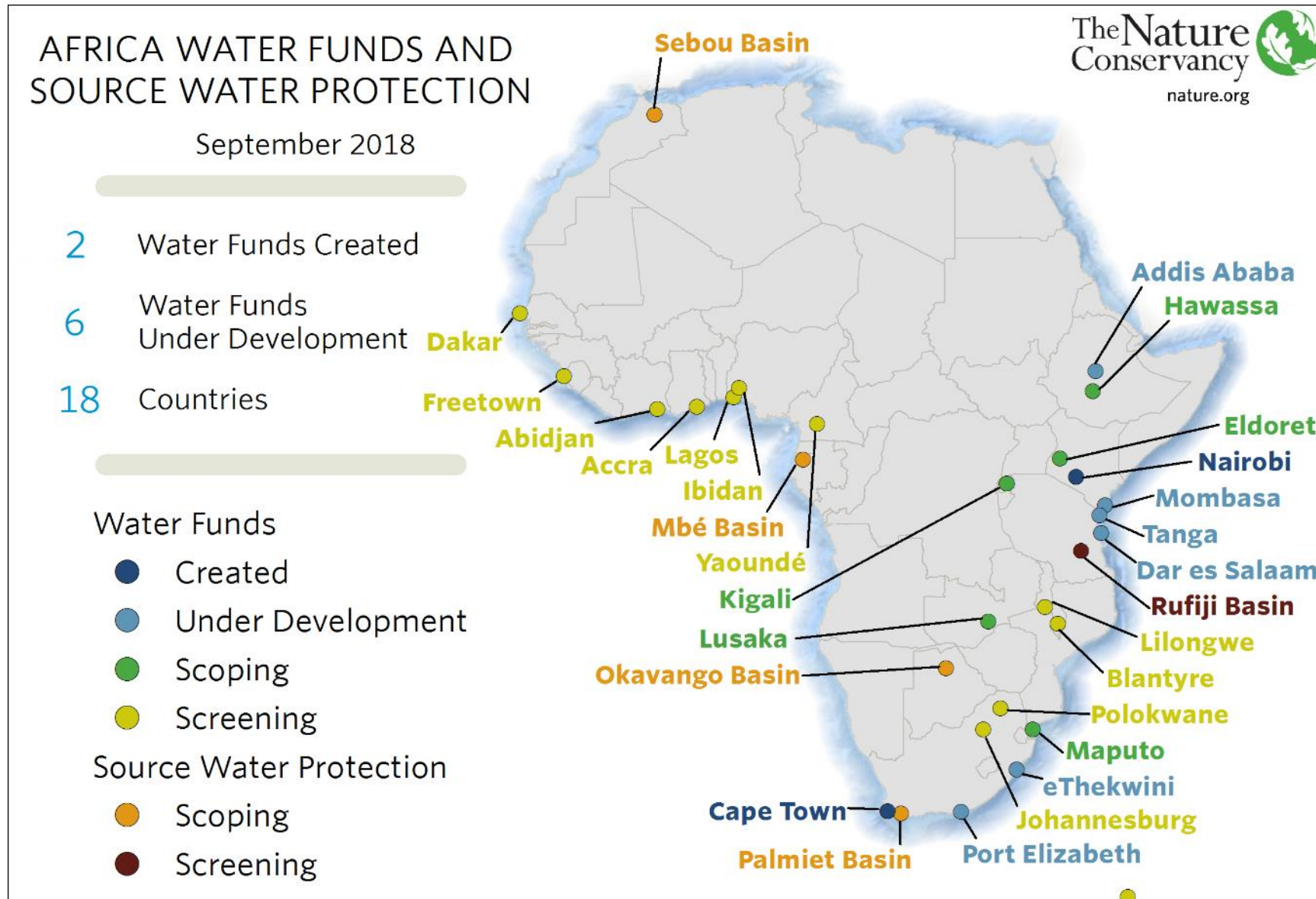
TYPICAL WATER FUNDS ENABLING CONDITIONS

- Relatively small watershed area (less area to conserve, less cost)
- Low population density in watershed area (less people, less transaction costs)
- Large reliance/value on water downstream (larger cities, critical infrastructure or ecosystems)
- Urban water utility as entry point (defines “Water Fund”, but not limiting model)
- Limited treatment technology (the less complex the treatment, the more sensitive to source water quality)

CHALLENGES TO THE WATER FUNDS MODEL FOR IW PROJECTS

- Often have a large catchment area
 - *can focus on smaller watershed within the larger IW project*
- Trans-national nature of the basins
 - *avoiding classic PES payments, using convening power of basin commissions*
 - *financial flows across borders requires trust building*
- Downstream user that value the resource are numerous
 - *useful to focus on one or two primary ones; e.g., agriculture and tourism, urban and hydropower)*

Potential Water Funds and Source Water Protection Projects



Africa Source Water Protection Strategy

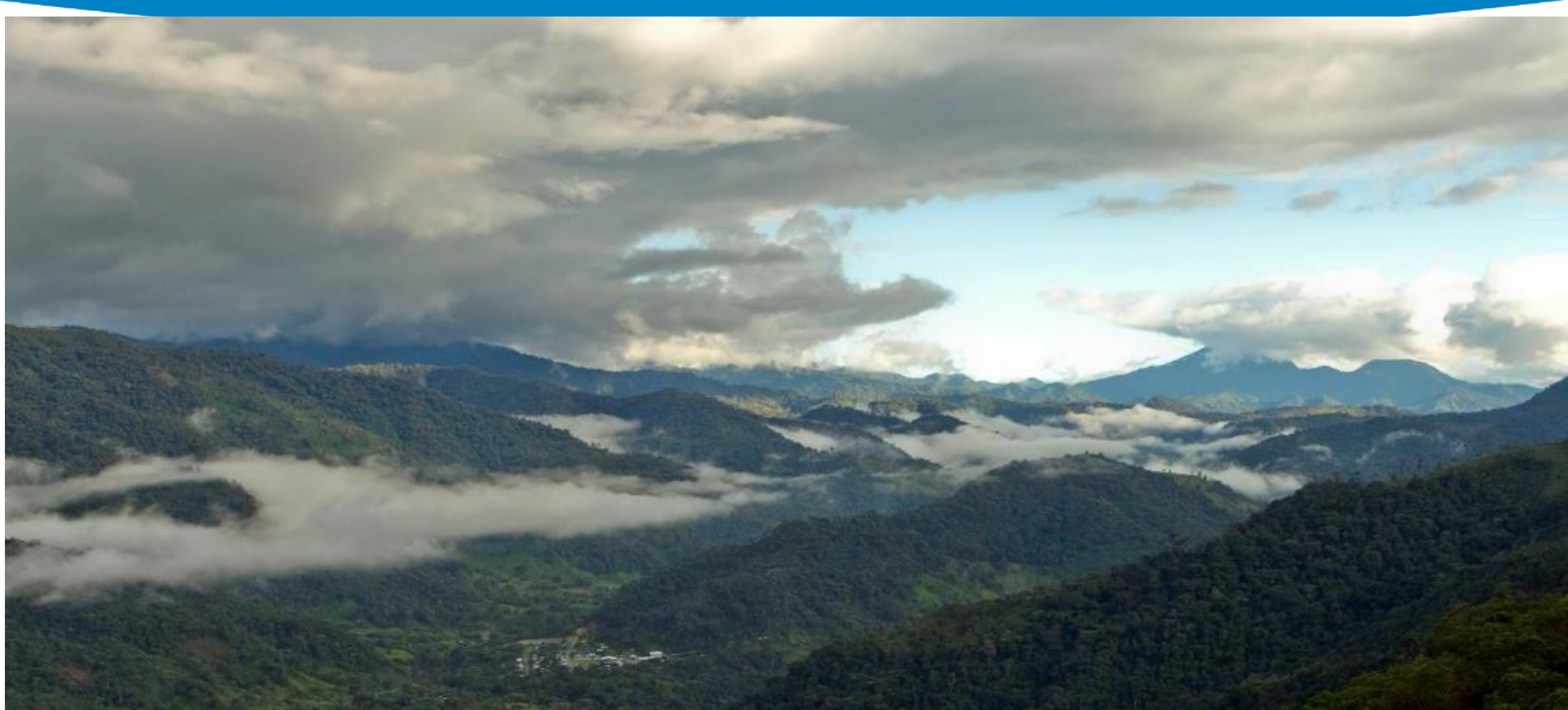
- Protection of source watersheds through replicable models

By 2025, investment in source water protection has:

- reduced the risk of water supply disruptions for at least 25 million people in Africa*
 - improved water quality or flow in 10 basins, at least 5 of which have high biodiversity value*
 - improved land-use management across 1.8 million hectares*
 - improved livelihoods for over 100,000 people*
- Strategy includes a Water Funds component (urban water supply entry) and broader source water protection basins







QUESTIONS?





FEASIBILITY PHASE – KEY STEPS

David Schaub-Jones • Water Funds Programme Manager • The Nature Conservancy

WATER FUNDS PROJECT CYCLE

FEASIBILITY PHASE

PURPOSE

To test eligibility by quickly and efficiently determining if there are water security challenges and a potential for a Water Fund to help.

If so, then assessing the feasibility (by more deeply understanding the situation) and generally determining how a Water Fund could positively contribute to water security within a defined area/region.



OBJECTIVES

1

**A GO OR NO GO
DECISION TO PROCEED
BEYOND ELIGIBILITY**

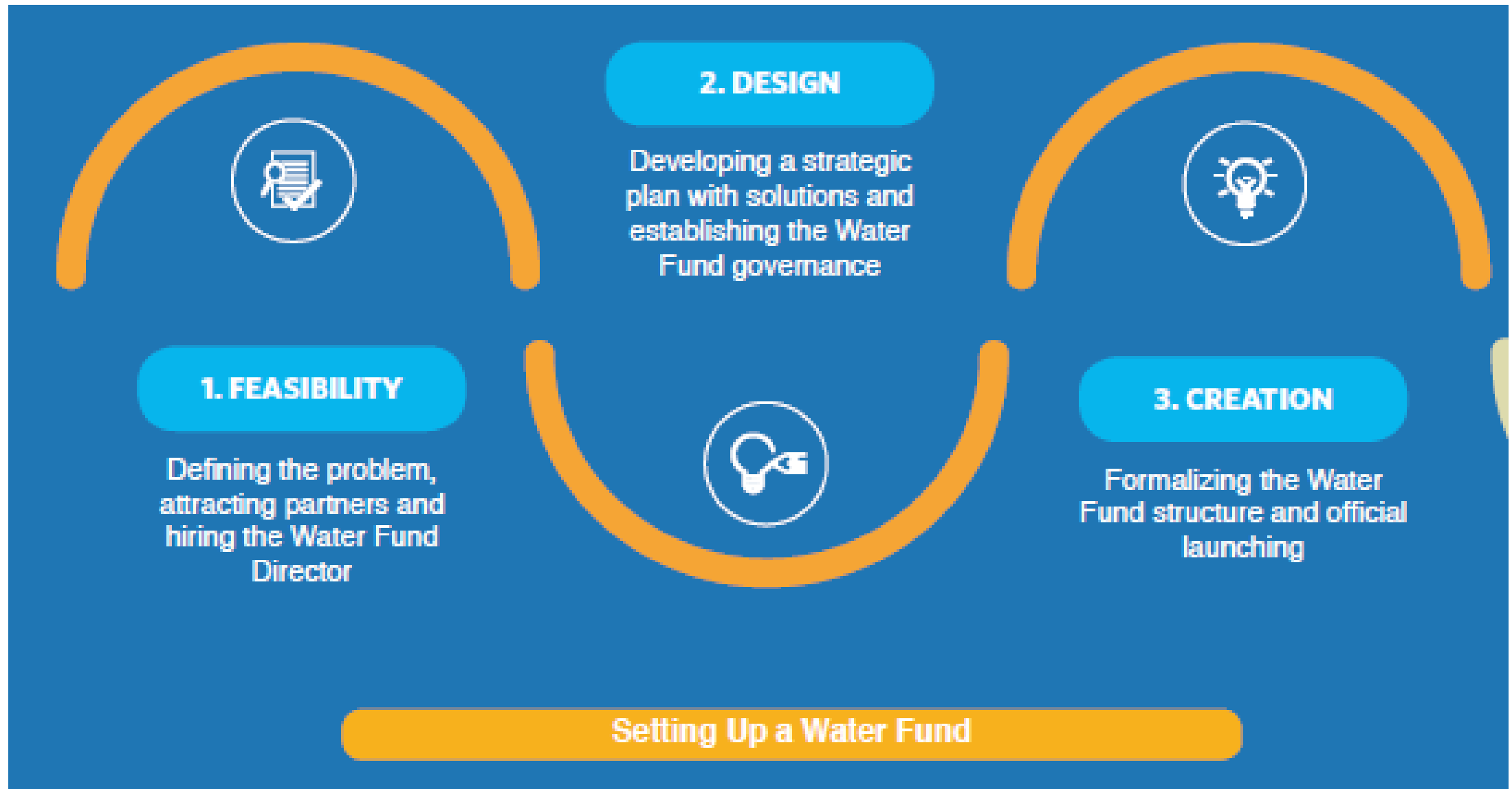
2

**A GO OR NO GO DECISION TO
PROCEED BEYOND THE
FEASIBILITY PHASE**

3

**COMMITMENT OF
RESOURCES TO DESIGN
THE WATER FUND**

WATER FUNDS (EARLY) PROJECT CYCLE





DELIVERABLES / OUTCOMES



ELIGIBILITY SCREENING



FEASIBILITY SITUATION
ANALYSIS REPORT



FEASIBILITY DECISION
SUPPORT DOCUMENT



FORMAL COMMITMENT

TRANSITION REQUIREMENTS

What conditions must be met before moving to the Design Phase?

- The Water Fund is deemed to be a feasible mechanism
- Resources have been committed
- Formal 'go' decision has been made
- Access to required design data

Feasibility Phase Checklist and Action Plan

<input type="checkbox"/> Governance	<input type="checkbox"/> Science	<input type="checkbox"/> Finance	<input type="checkbox"/> Implementation	<input type="checkbox"/> Communications
<ul style="list-style-type: none"><input type="checkbox"/> Inventory of relevant government agencies and policies complete<input type="checkbox"/> Stakeholder map complete<input type="checkbox"/> Champions identified and engaged<input type="checkbox"/> Critical stakeholders engaged to learn more about water security situation<input type="checkbox"/> Institutional and political conditions identified	<ul style="list-style-type: none"><input type="checkbox"/> Critical data and information reviewed, data gaps identified<input type="checkbox"/> 5 dimensions of water security analyzed<input type="checkbox"/> Potential WF interventions identified and prioritized<input type="checkbox"/> Consensus achieved on key challenges the WF would help address and why WF is the right mechanism to solve the identified challenges	<ul style="list-style-type: none"><input type="checkbox"/> Detailed cost-estimate of Design Phase complete<input type="checkbox"/> High-level / rough cost estimate of total Water Fund cost complete<input type="checkbox"/> Potential funding sources identified	<ul style="list-style-type: none"><input type="checkbox"/> Capacity to design WF identified/available<input type="checkbox"/> SWOT analysis complete<input type="checkbox"/> Recommendation of Go/No Go Decision<input type="checkbox"/> WF Director hired	<ul style="list-style-type: none"><input type="checkbox"/> Elevator pitch for WF complete<input type="checkbox"/> Relevant reports prepared (e.g. Situation Analysis, Decision Support Document)

Learn more about each area: waterfundstoolbox.org/project-cycle/feasibility/



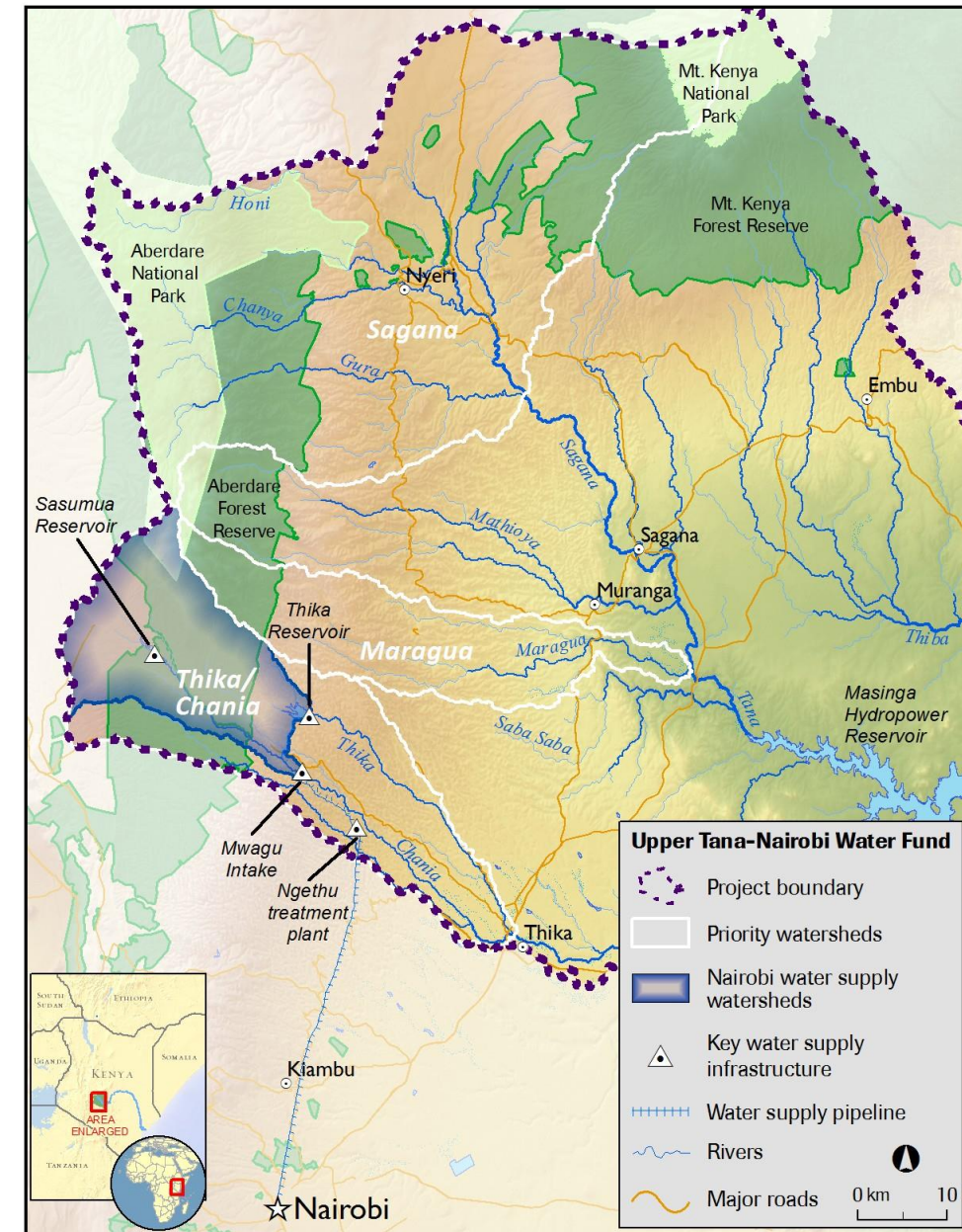
SCIENCE GAP ANALYSIS



What is the geography for
your emerging Water Fund?

DEFINING GEOGRAPHIC SCOPE

- Scope selection evolving process, don't expect to get it “right” from the start
- Begin with the interest of your key downstream stakeholders/users and work your way up
- Key stakeholders must be engaged in the beginning
- Consider priority and/or pilot areas to simplify and focus efforts
- Consider social basin as well as geographic ones, note the “social basin” will always be shifting



KEY CONCEPTS: DEFINING THE PROBLEM, GOALS AND SOLUTION

- Understanding the key water security issues that a water fund might be able to help address is essential for defining the overall problem.
- Understanding key ecosystem services that might help to address those issues is essential for defining the range of solutions a water fund may be able to offer.
- Consideration of how this broad range of solutions is valued by different stakeholders is important, as some will be more financially viable than others.
- Goals should be based on science, collaboratively developed, and meet the needs of people and nature.
- Engagement of stakeholders and champions in the process of defining the problem, goals and solutions is critical.



GOVERNANCE: Identifying Stakeholders & Champions

IDENTIFYING STAKEHOLDERS AND CHAMPIONS

Objectives

Develop a basic 'stakeholder map' that includes identifying a list of high-influence / high-interest stakeholders.

Create a list of potential champions.

Identify stakeholders and champions to

- (a) enhance understanding of who might be involved/impacted by a water fund and
- (b) who likely holds influence in the proposed water fund vs their interest in it.

KEY CONCEPTS: STAKEHOLDERS AND CHAMPIONS

Stakeholders are those who are affected – in diverse ways – by the problem to be addressed.

Depending on how they are affected, stakeholders will value the range of potential solutions a water fund can offer differently, and will thus hold different levels of interest and influence in terms of their participation.

In conducting a stakeholder analysis, review the actors within the geographic and social basins.

The involvement of identified stakeholders in further brainstorming and prioritizing of potential solutions is important.

Champions are a special subset of stakeholders who will be motivated to take deliberate action to advance solutions.

IDENTIFY INSTITUTIONAL CONDITIONS

WHAT ARE THE MOST IMPORTANT TOPICS TO INCLUDE IN THIS ANALYSIS?



EXISTING
LEGISLATION



CURRENT
MANAGEMENT PLANS



LEGAL NATURE OF
POTENTIAL PARTNERS



RESOURCE
ADMINISTRATION

IDENTIFY INSTITUTIONAL CONDITIONS

Consider and document findings around the following questions:

- What existing legislation should be taken into account when creating a water fund?
- Are there existing management plans with relevance to the water issue(s) your water fund will address?
- Is there adequate capacity for resource administration within the water fund project area?
- Barriers vs perceptions- on legal landscape



KEY IDEAS: IDENTIFY INSTITUTIONAL CONDITIONS

- **Fundraising for the water fund:** For example, what are the fiscal implications of donations?
- **Decision making mechanism:** for example, in some countries the role of the government will be mandatory.
- **Disbursement of funds and implementation of projects:** For example, how will you make sure the funds get to the ground for implementation?
- **Can public funds be managed conjunctively with private funds?** Understand limitations
- **Are there any limitations for private organizations in managing public funds?** Accessing, accounting, timelines





What
stakeholders
can you
suggest?



STAKEHOLDER MAPPING

Stakeholder mapping should identify the type of roles and involvement stakeholders might have in the water fund. For instance, some examples of different roles stakeholders might play include:



**MEMBER OF THE
WATER FUND**



**COLLABORATION &
COORDINATION**



**UPSTREAM
STAKEHOLDERS**



**TECHNICAL
EXPERTS**



**NGOs & ORGANIZATIONS THAT
IMPLEMENT CONSERVATION
WORK ON THE GROUND**



**DEVELOPMENT AGENCIES
& PHILANTHROPIC
ORGANIZATIONS**

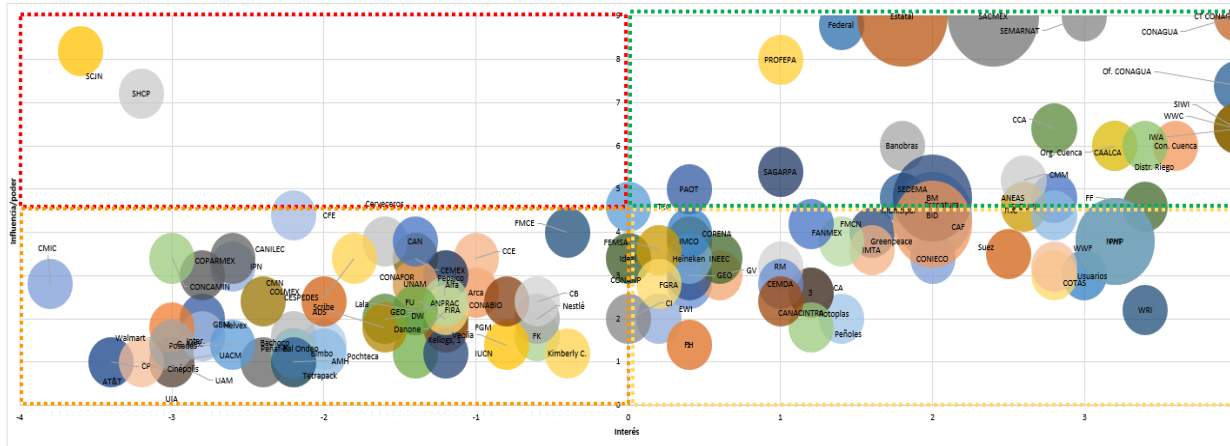


**NON-FAVORABLE
STAKEHOLDERS**

Access the tool in the Water Funds Toolbox:

waterfundstoolbox.org/methods

Example of output from tool



Note: this tool was developed by the Latin American Water Funds Partnership.

Learn from the global experience



How were stakeholders identified for the Upper Tana-Nairobi Water Fund, Kenya?

Listen to Fred Kihara from TNC describe how stakeholders were identified.



How were stakeholders identified for the Guayaquil Water Fund, Ecuador?

Listen to Jaime Camacho from TNC describe how stakeholders were identified.



How were stakeholders identified in the Rio Grande Water Fund, USA?

Listen to Laura McCarthy from TNC describe how stakeholders were identified.

<input type="checkbox"/> Governance	<input type="checkbox"/> Science	<input type="checkbox"/> Finance	<input type="checkbox"/> Implementation	<input type="checkbox"/> Communications
<ul style="list-style-type: none"> <input type="checkbox"/> Inventory of relevant government agencies and policies complete <input type="checkbox"/> Stakeholder map complete <input type="checkbox"/> Champions identified and engaged <input type="checkbox"/> Critical stakeholders engaged to learn more about water security situation <input type="checkbox"/> Institutional and political conditions identified 	<ul style="list-style-type: none"> <input type="checkbox"/> Critical data and information reviewed, data gaps identified <input type="checkbox"/> 5 dimensions of water security analyzed <input type="checkbox"/> Potential WF interventions identified and prioritized <input type="checkbox"/> Consensus achieved on key challenges the WF would help address and why WF is the right mechanism to solve the identified challenges 	<ul style="list-style-type: none"> <input type="checkbox"/> Detailed cost-estimate of Design Phase complete <input type="checkbox"/> High-level / rough cost estimate of total Water Fund cost complete <input type="checkbox"/> Potential funding sources identified 	<ul style="list-style-type: none"> <input type="checkbox"/> Capacity to design WF identified/available <input type="checkbox"/> SWOT analysis complete <input type="checkbox"/> Recommendation of Go/ No Go Decision <input type="checkbox"/> WF Director hired 	<ul style="list-style-type: none"> <input type="checkbox"/> Elevator pitch for WF complete <input type="checkbox"/> Relevant reports prepared (e.g. Situation Analysis, Decision Support Document)

Action Plan



Pulling it all together in an Action Plan