



CLEAN WATER IN

# Papua New Guinea

A blueprint for scalable, gravity-fed water infrastructure

**3,500+**

people served today

**~\$5**

per person reached

**10,000**

gallons piped daily

# The big idea

We don't have a water shortage — we have a delivery gap.



## Mountain-top Surplus

An existing mountain system already produces ~5,000 gallons/day more than it needs.



## The Gravity Advantage

Gravity moves safe water to neighbors two miles away — no pumps, no power.



## Make it clean and SAFE

Simple, low-cost treatment removes the pathogens that piped creek water can still carry.

*The result: safe water at roughly \$5 per person — about a 10× return versus the global NGO average.*

# By the numbers

What the first system has already delivered

**3,500+**

people served by the first system

**~2.2 km**

of hand-dug pipeline, 9 spigots

**~\$15k**

total cost (vs. ~\$25k typical)

**< 6 mo**

to build (vs. ~1 year typical)

**~360 m**

elevation drop powers the flow

**K20**

per household funds repairs (~\$4)

*Typhoid outbreaks in the original village have been nearly eliminated.*

# The plan: four phases

From a proven pilot to a region-wide model



## PHASE 1 • DONE

### Pilot system built (2024)

Catchment, tanks, ~2.2 km pipeline — reaches ~3,500 people



## PHASE 2 • NOW

### Bridge the two-mile gap

Pilot treatment, then extend ~1.5 km — ~1,500 more people (~\$5.8k)



## PHASE 3 • NEXT

### Reach the mountaintop school

New system + ~7 km line — ~2,700+ people (~\$14k)



## PHASE 4 • AHEAD

### Scale across the region

Proven model — grow through grant & corporate partnerships

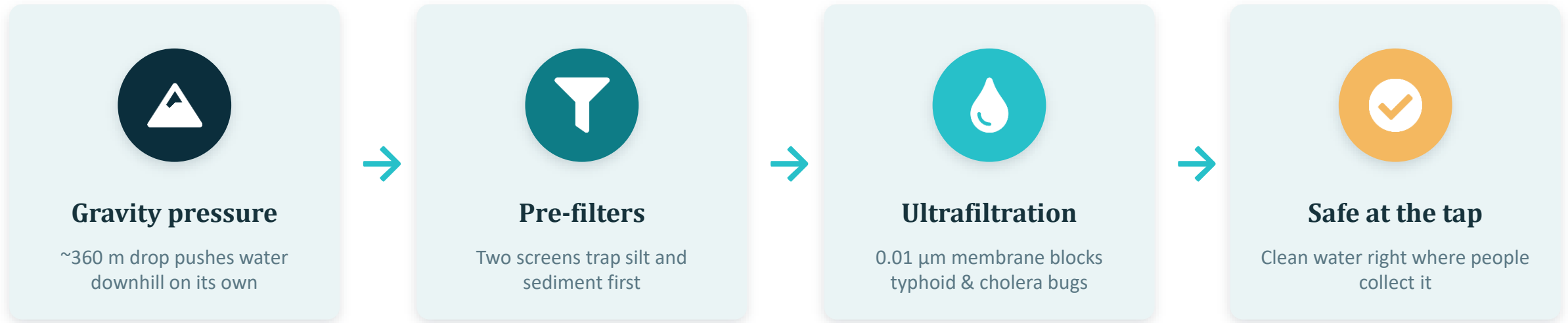


Existing system (blue) and planned routes (yellow), mapped on Google Earth.



# How we make it safe

A simple, gravity-powered filter at each village tap — no electricity, no chemicals



**Why one filter per village?** Each village maintains its own unit, so one clog never cuts off everyone — and a simple twist-to-flush keeps it running.

# Why it works — and why it lasts



## Community does the heavy lifting

Villagers volunteer to dig trenches, carry materials, and pour concrete.



## Built for gravity, not power

No electricity needed — ideal where solar would be stolen.



## Easy to repair locally

Simple parts and a twist-to-flush filter a local plumber can maintain.



## Local leadership keeps it alive

A trusted leader bridges the technical, funding, and community sides.



*The community contributes the labor that makes the economics work.*

**The hard part isn't the pipe — it's the long term.** Funded committees, collected fees, and trained repairers are what we plan for deliberately.



# More than water

What safe water changes, every day:



Fewer typhoid cases — and fewer of the fears that follow them



Women and children freed from hours of carrying water



Children get to school on time and stay healthy



Coffee farmers wash and dry beans closer to home

*“Today, water is right at my doorstep.”*

— Rosa Wauweso, Women’s Representative

# The water is already flowing.

*We just need partners to help carry it to the end of the line.*



Fund an expansion



Back the treatment pilot



Help us scale region-wide

