

AWASH

10

NILE

TIGRIS AND  
EUPHRATES

# RIVERS that Shaped THE World

RHINE

AMAZON

Marilee Peters  
Art by Kim Rosen

ZAMBEZI



annick press  
toronto + new york + vancouver

THAMES

MISSISSIPPI

YANGTZE

GANGES

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# Introduction

**I**MAGINE THIS: you're the leader of your country, and you're worried. You're starting to lose your influence—your grip on power is getting weaker by the day. What can you do to show people you're still a forceful leader, and inspire their trust again?

For Mao Zedong, the leader of China from 1949 until the 1970s, the answer was simple: swim across the Yangtze, the country's biggest, strongest, most famous river. So that's what he did. When he arrived dripping and breathless on the far side, the whole country considered him a hero, and Mao was able to stay in power long enough to shape the future of China.



River marshlands are home to the Ma'dān people of Iraq

Mao wasn't the only one to realize that rivers are important symbols. For hundreds of years, leaders have known that by showing they have power over rivers, they can impress people, or intimidate them, or even change history. In 55 BCE, Julius Caesar had his troops build the first bridge over the Rhine River, a feat that startled the Germanic tribes of Europe so much, they gave up on attacking Rome (for a while). And when the Tigris River wasn't a reliable enough source of water for his palace gardens, King Sennacherib of ancient Mesopotamia had miles of aqueducts built to divert its water. The result is thought to have been the fabled Hanging Gardens of Babylon—one of the wonders of the ancient world.

Then there was the shogun of Japan, who refused to allow the flood-prone Tone River to destroy his brand-new palace in the little town of Edo. He had workers dig for 50 years to create a new channel for the river, sending it a safe distance away. Today, that little town the shogun saved has become one of the world's biggest cities.

Powerful leaders like these, who command armies of workers and possess unlimited amounts of money, can sometimes manage to control rivers and change history. But more often, it's the rivers that are in charge.

For many people around the world, their way of life and even their survival depends on rivers. Take the Ma'dān people of Iraq, who live in the middle of a vast marshland where the Tigris and Euphrates rivers meet. They live on floating platforms anchored to palm trees, build their homes from reeds and clay scooped from the riverbanks, and paddle around in reed boats. They eat fish and wild birds, grow rice along the riverbanks, and keep water buffalo. The river gives the Ma'dān everything they need to survive.

You might think that's an extreme example of a river's influence, but here's another one. Hundreds of years ago, the Rhine River in Europe was edged by dozens of little kingdoms. They were always warring with each other—until they were forced to band together to drive out the robber barons who were holding up ships and making





life miserable for everyone. Today, European countries are using the lessons they've learned from centuries of cooperation along the Rhine to join forces against a new enemy: industrial polluters that are endangering the life of the river.

But what happens when the river you've come to depend on changes? After all, rivers can be fickle—sometimes they alter their course, or flood, or even dry up. Today, the Indus River in southern Pakistan trickles through a desert landscape. But thousands of years ago, cities flourished along its banks, making up a major civilization known as the Harappan Empire. Never heard of it? That's because the Indus changed its course, and seemingly overnight the Harappan civilization crumbled. That's the power of a river.

The 10 stories that you'll read in this book explore the dramatic and varied ways that rivers have shaped us, and the ways that we've tried—sometimes successfully, sometimes with unforeseen consequences—to shape them. It all begins with where we came from...

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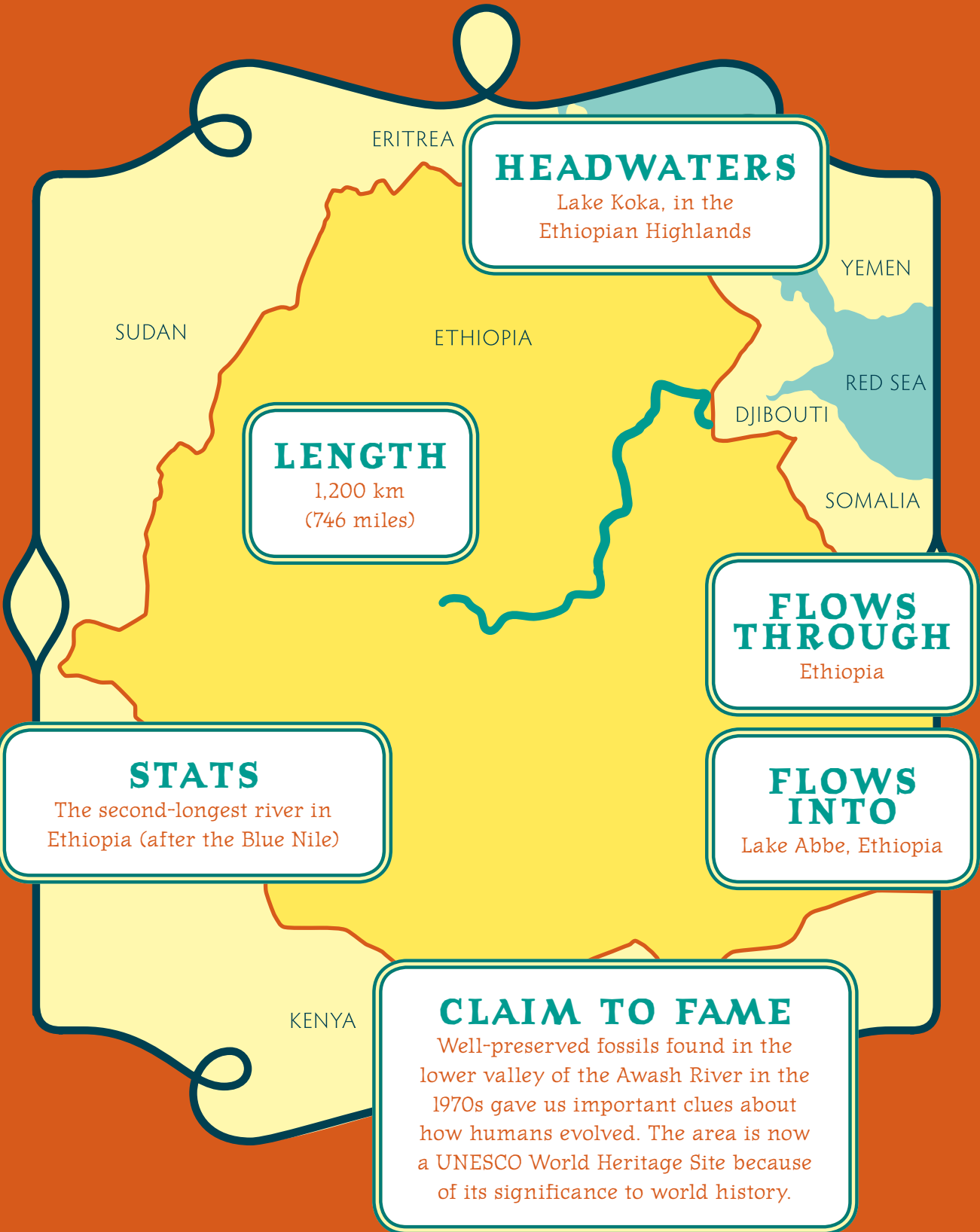
# AWASH

A River of Bones

## NAME

The Awash is also called *Wehaietu* in the Afar language of Ethiopia.





ERITREA

## HEADWATERS

Lake Koka, in the Ethiopian Highlands

YEMEN

SUDAN

ETHIOPIA

RED SEA

DJIBOUTI

SOMALIA

## LENGTH

1,200 km  
(746 miles)

## FLOWS THROUGH

Ethiopia

## STATS

The second-longest river in Ethiopia (after the Blue Nile)

## FLOWS INTO

Lake Abbe, Ethiopia

KENYA

## CLAIM TO FAME

Well-preserved fossils found in the lower valley of the Awash River in the 1970s gave us important clues about how humans evolved. The area is now a UNESCO World Heritage Site because of its significance to world history.







# ETHIOPIA [ 3 MILLION YEARS AGO ]

*The little ape scuttled along, hoping to escape the burning orange gaze of the afternoon sun. She should have been asleep with her babies, high up in the branches of a mahogany tree amid the cooling breeze, but she'd been driven out of the shelter of the trees by one thing: hunger. Her family hadn't eaten for several days. Now she was desperate. So desperate that she'd ventured out into the savanna to seek food.*

*She sped through the grassy meadow. It wasn't safe here; she didn't dare stop to look for food yet. The grass was so tall she could barely see over it to watch for enemies, and it offered no cover. She needed to get to the river. She'd find shade and shelter in the bushes there, and plenty of fruit to pick from the low-hanging branches. The ape could already smell the fresh river air, and almost taste the coolness of the water. She would eat and drink her fill, then gather fruit to carry back to her babies.*

*At last she made it to the river. She picked her way down the steep bank to the water's edge, dipped her hands in, and scooped up dripping mouthfuls. Bliss.*

*But as she crouched in the shallows, the ape mother was unaware of a new danger. In the mountains far above, it had been raining torrentially for days. A hundred swollen streams had raced into the river. Now, a huge flash flood was pounding downstream. With a sudden roar, a wall of water as tall as an elephant surged around a bend and crashed into the tiny ape, tossing her up and carrying her along in a churning flow of white water.*

*Days later, as the water levels in the river returned to normal, the little ape mother's body came to rest on the riverbed. Layers of fine dirt and sand in the water sifted down, covering her over. Time passed, and her small bones slowly fossilized in their river grave. Waiting ...*



## The Story of the Awash

**T**HE AWASH RIVER IS BORN IN THE RAINY GREEN HILLS of Ethiopia's fertile highlands. The river hurtles downhill at great speed, tumbling through steep gorges until it reaches the broad, bare plains of the Danakil Desert. Then it slows, winding its way lazily through the desert to the Afar Triangle, which at 156 meters (512 feet) below sea level is one of the lowest places on earth.

Today, the Afar Triangle is also one of the most inhospitable places on earth: a salt flat where every breath of wind raises clouds of dust and temperatures climb as high as 50 degrees Celsius (122 degrees Fahrenheit). Thin strips of greenery edging the river are the only signs of life in this barren region. But the Afar Triangle, now so brown and dusty, was once vibrant and alive.

Here, three million years ago, the Awash River flowed through a savanna carpeted with tall grass and crossed with many smaller rivers and streams. The land had once been covered by tropical rainforests, but these were shrinking as the climate dried. The weather and plant life were changing in the region, and living creatures had to adapt or risk extinction. Rainforest apes needed to venture out from the trees, into the open savanna.

## Stand Up, Lucy!

ON NOVEMBER 30, 1974, Donald Johanson and Tom Gray, two paleoanthropologists (scientists who study the bones of ancient humans and extinct human ancestors), were fossil hunting in the badlands of the Afar desert when one of them spotted something jutting out from a crumbling cliffside. They stopped for a closer look. Sure enough, it was a fossilized bone.

Carefully brushing away the dirt, they soon discovered more bones around it. Johanson and Gray could hardly believe their luck as they realized they'd stumbled upon the skeleton of an ancient hominid (an apelike ancestor of modern humans). When the bones were excavated and studied, they proved to be from a 3.2-million-year-old species of ancient ape that had never been seen before. Johanson named the species *Australopithecus afarensis*, but the little skeleton quickly became famous under another name: Lucy.



## WONDERFUL LUCY

The skeleton Donald Johanson discovered is famous throughout the English-speaking world as Lucy. She got the name because Johanson was a big fan of the 1960s pop group The Beatles, and the night her bones were found he celebrated by playing his favorite song over and over—“Lucy in the Sky with Diamonds.” But in Ethiopia she has a different name: *Dinkenes*, which in the Amharic language means “she is wonderful.”

## One Small Step for Humankind

**U**NTIL DONALD JOHANSON MADE HIS INCREDIBLE DISCOVERY, scientists believed the earliest human ancestors had evolved in Asia. Lucy changed all that. Thanks to her, we also know the answer to a key question about how humans evolved—the riddle of which came first, big brains or walking on two legs.

Before Lucy was discovered, many paleoanthropologists had argued that big brains had come first. Apes, they believed, had gradually developed large brains, which helped them to make other important evolutionary changes, such as walking upright and using tools. But Lucy had a very small brain, only about a third of the size of a modern human's, yet her bone structure showed she had walked upright.

So bipedalism—or walking on two legs, rather than four—was the first step for our ape ancestors. And that baby step was taken along the Awash River.



Skull from a bipedal human ancestor



## DID YOU BRING YOUR HIP WADERS?

For a time, some scientists thought *Australopithecus* might have begun walking upright to make wading in streams and marshes easier. According to this “aquatic ape” theory, our early human ancestors spent so much time in the water they eventually lost their hairy coats and started to look like modern humans.



Interesting idea—but today, very few paleoanthropologists believe our ancestors were frequent waders. After all, African rivers have always been dangerous places. Hippopotamuses, which still today kill more people each year than any other African animal, lived in those ancient rivers along with snakes, crocodiles, and other deadly creatures. Rivers in Lucy’s time were also home to animals we no longer have to worry about, like giant river otters. It just wouldn’t have made sense for our ancestors to spend their time in such a risky environment. But we do know the lush vegetation on the riverbanks was an important source of food for *Australopithecus*.



