



Changing Course

Three Stories about Scale in the
Water Challenge

GIULIO BOCCALETTI

*Global Managing Director,
Water*

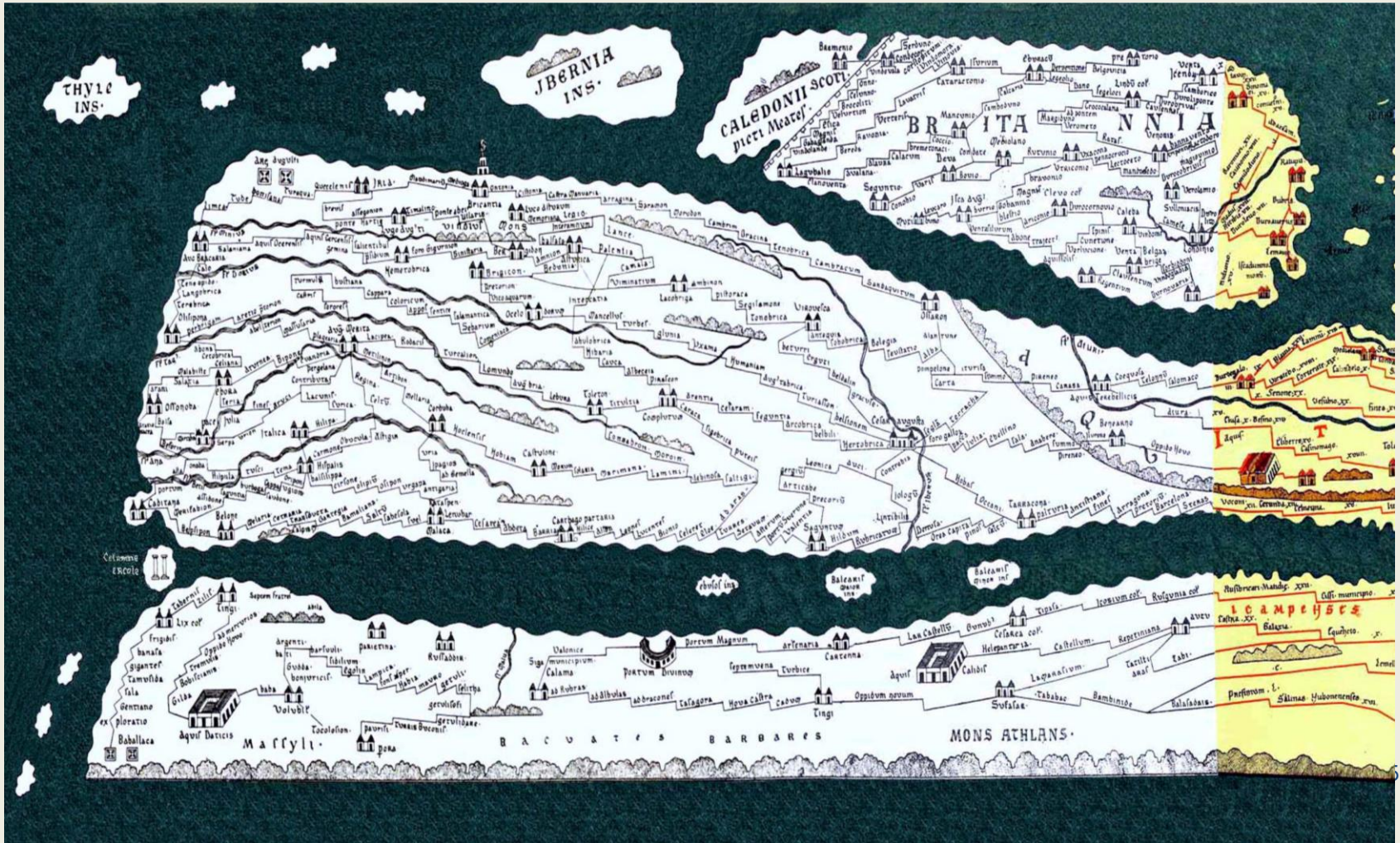


**Story from
the Past:
PEOPLE**

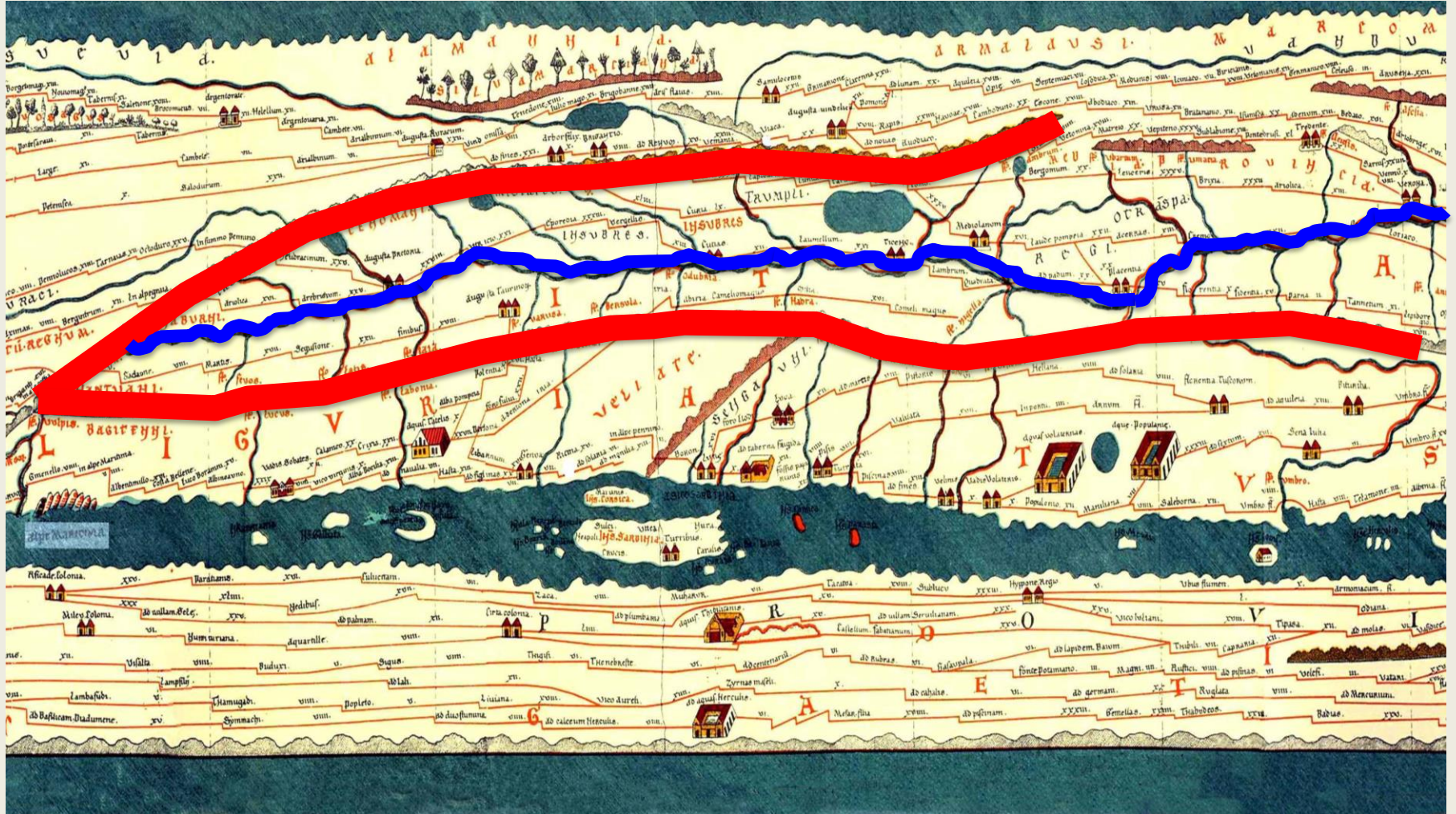
Imago Mundi, 6th Century BC

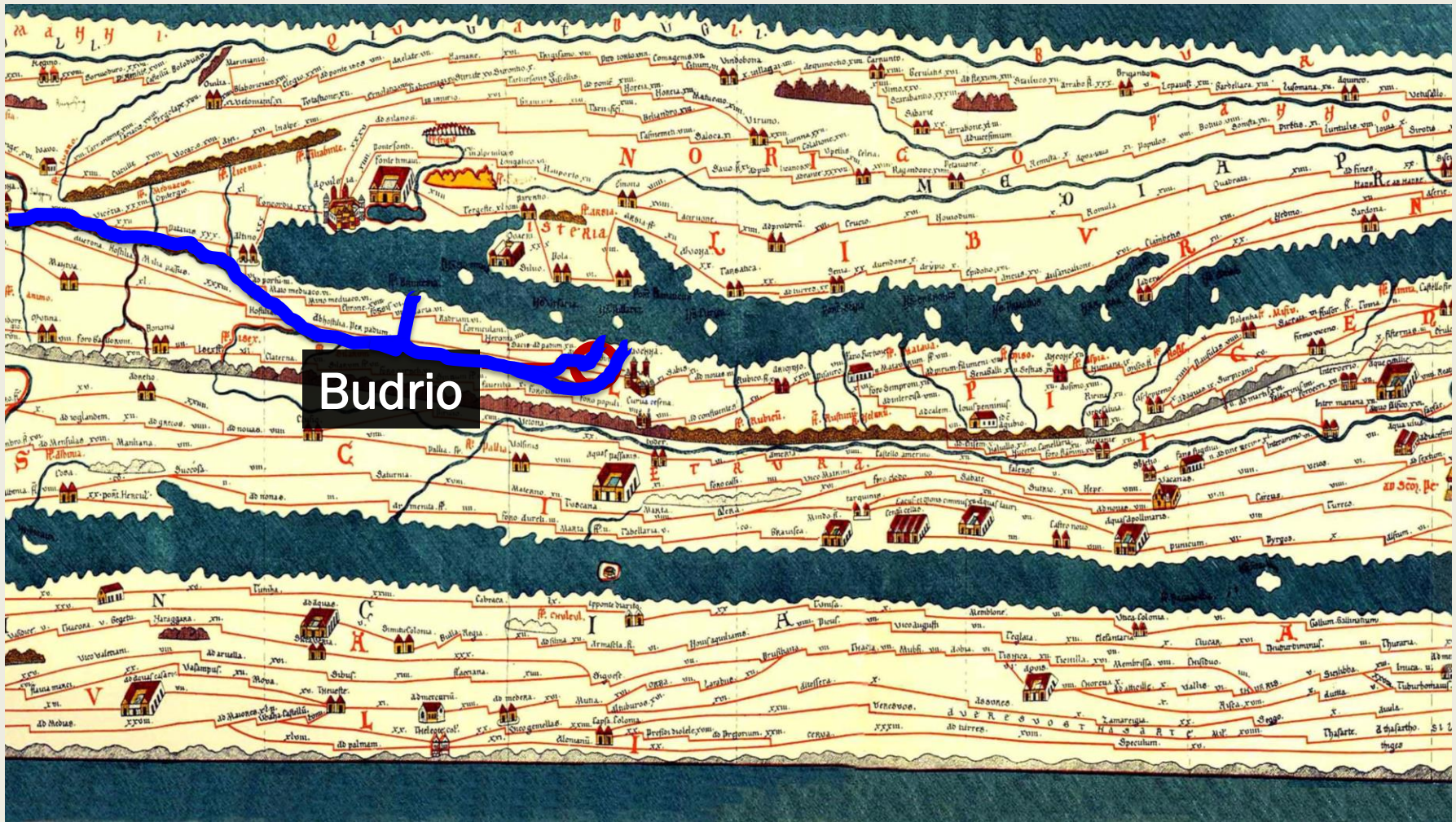












Budrio

BUDRIO, ITALY – PRESENT







Souvenirs de
Spain

176 858



PO RIVER DELTA, ITALY



Venice

Ferrara

Bologna

Budrio

Ravenna

Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Image Landsat

LA ROTTA DI FICAROLO, 12TH Century



Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Image Landsat

PO RIVER DELTA, ITALY

17th CENTURY



Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Image Landsat

PO RIVER DELTA, ITALY PRESENT



Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Image Landsat



Image Landsat
Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Google earth

A large waterfall cascading down a rocky cliff under a cloudy sky. The water is white and frothy as it falls, creating a misty spray at the bottom. The sky is dark and overcast. The overall scene is dramatic and powerful.

Story from the Present: NATURE









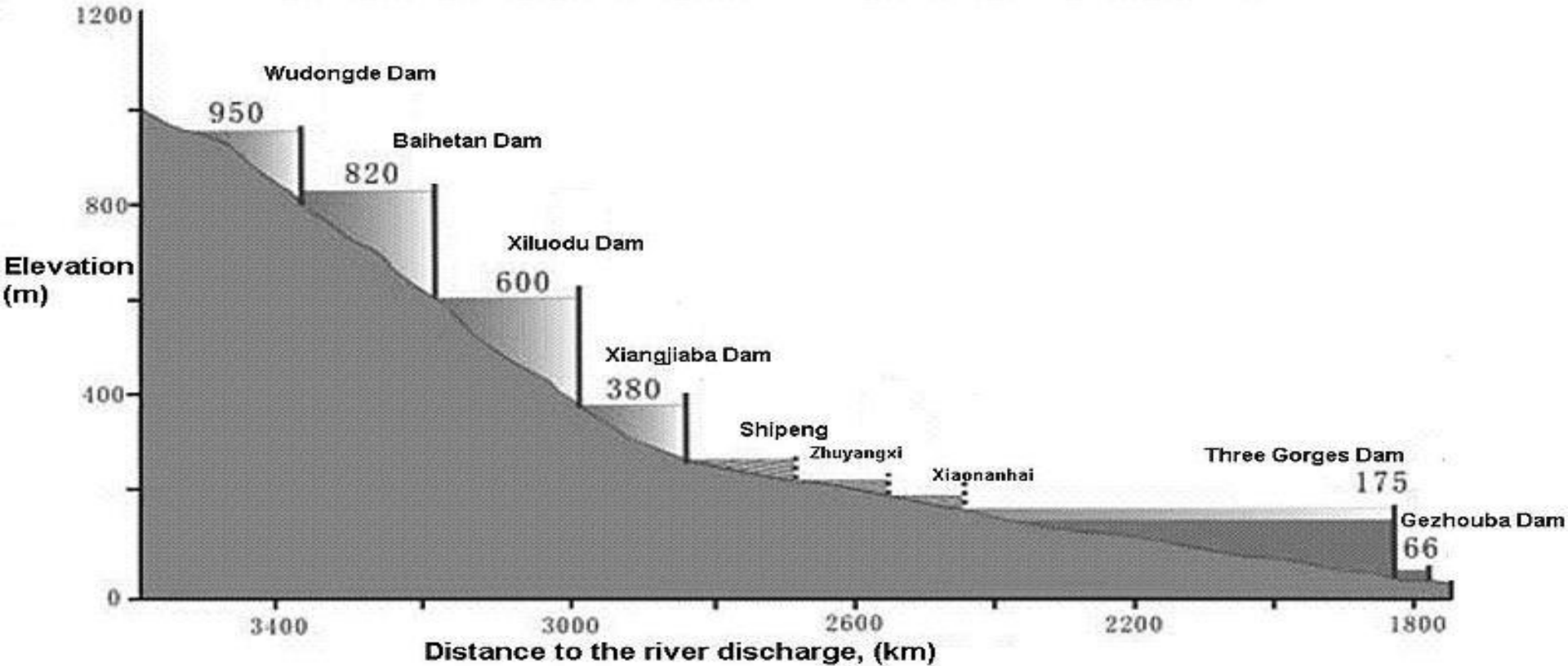




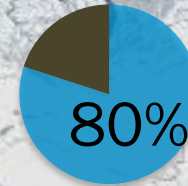
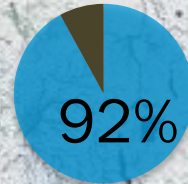
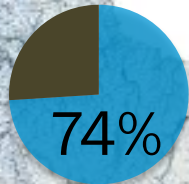
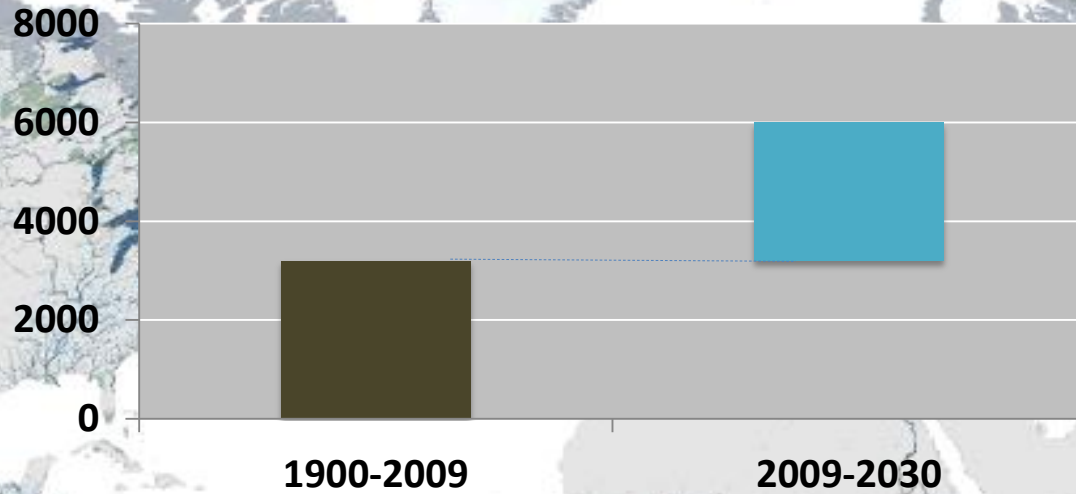




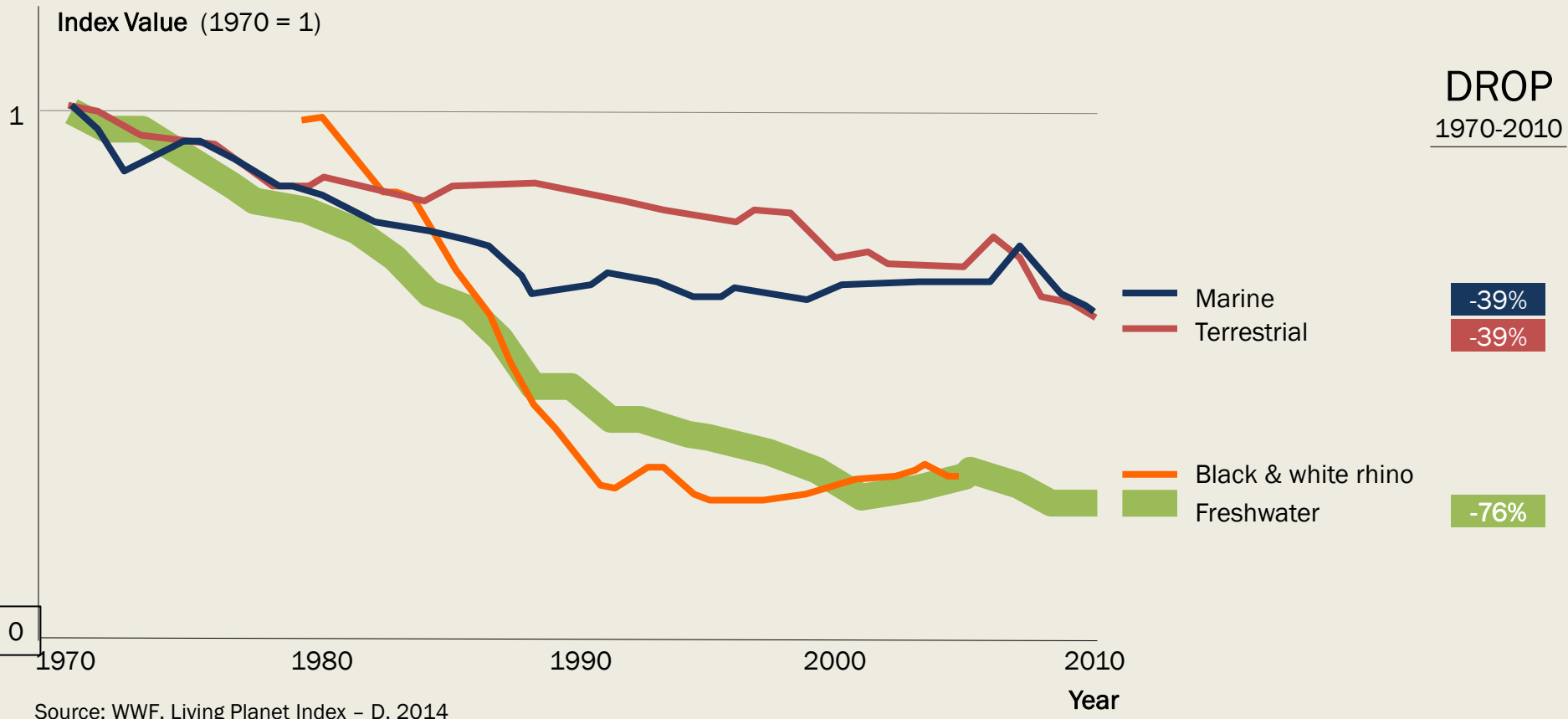
Longitudinal Profile of the Yangtze River upstream



WE ARE RUNNING OUT OF TIME



FRESHWATER ECOSYSTEMS ARE COLLAPSING

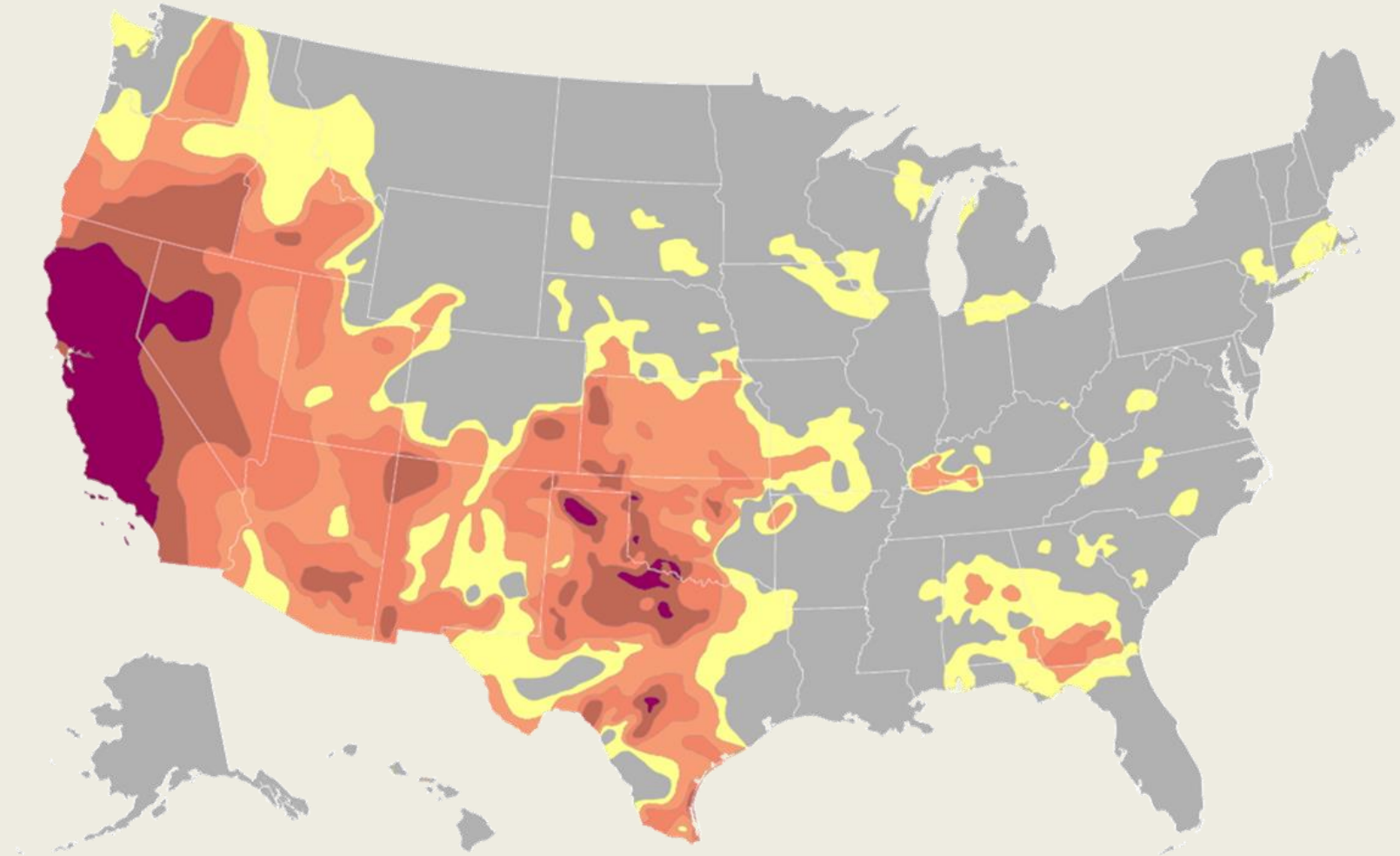


Source: WWF, Living Planet Index - D, 2014

A photograph of a concrete bridge spanning a river. The bridge has several large, cylindrical concrete piers supporting a flat deck with a metal railing. The water in the river is dark and turbulent, with white foam from rapids visible. In the background, there are green trees, some buildings, and a hillside under a clear blue sky. The text "Story from the Future: CHOICES" is overlaid in large, white, sans-serif font across the center of the image.

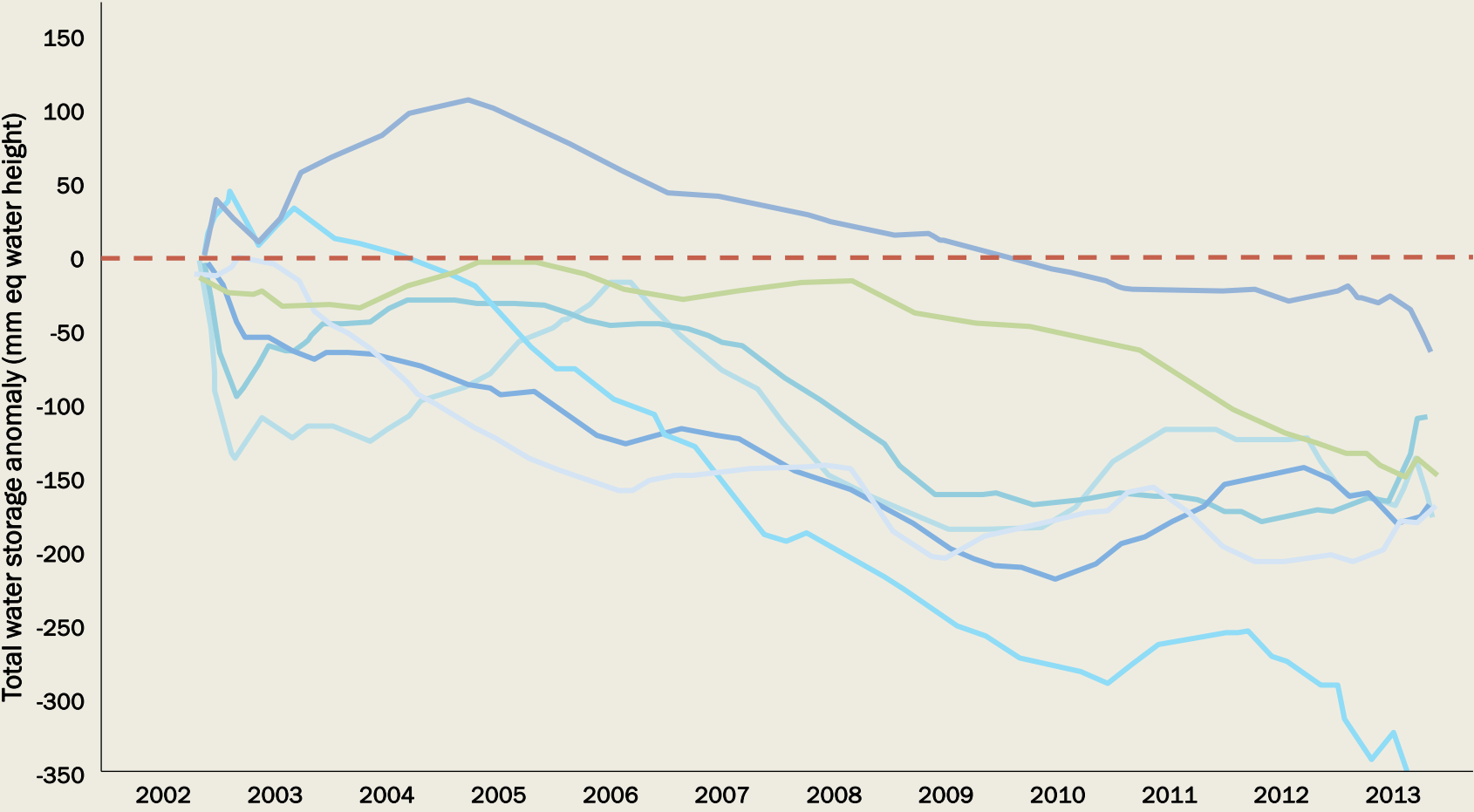
**Story from
the Future:
CHOICES**

DROUGHTS ARE WORSE THAN EVER



Sources: National Climatic Data Center, National Drought Mitigation Center, U.S. Department of Agriculture, National Oceanic and Atmospheric Administration:

STORAGE IS DECLINING IN MAJOR GLOBAL AQUIFERS



Source: J. S. Famiglietti, The Global Groundwater Crisis, Nature Climate Change, November 2014

WE ARE ON AN UNSUSTAINABLE TRAJECTORY



July – September, 1989

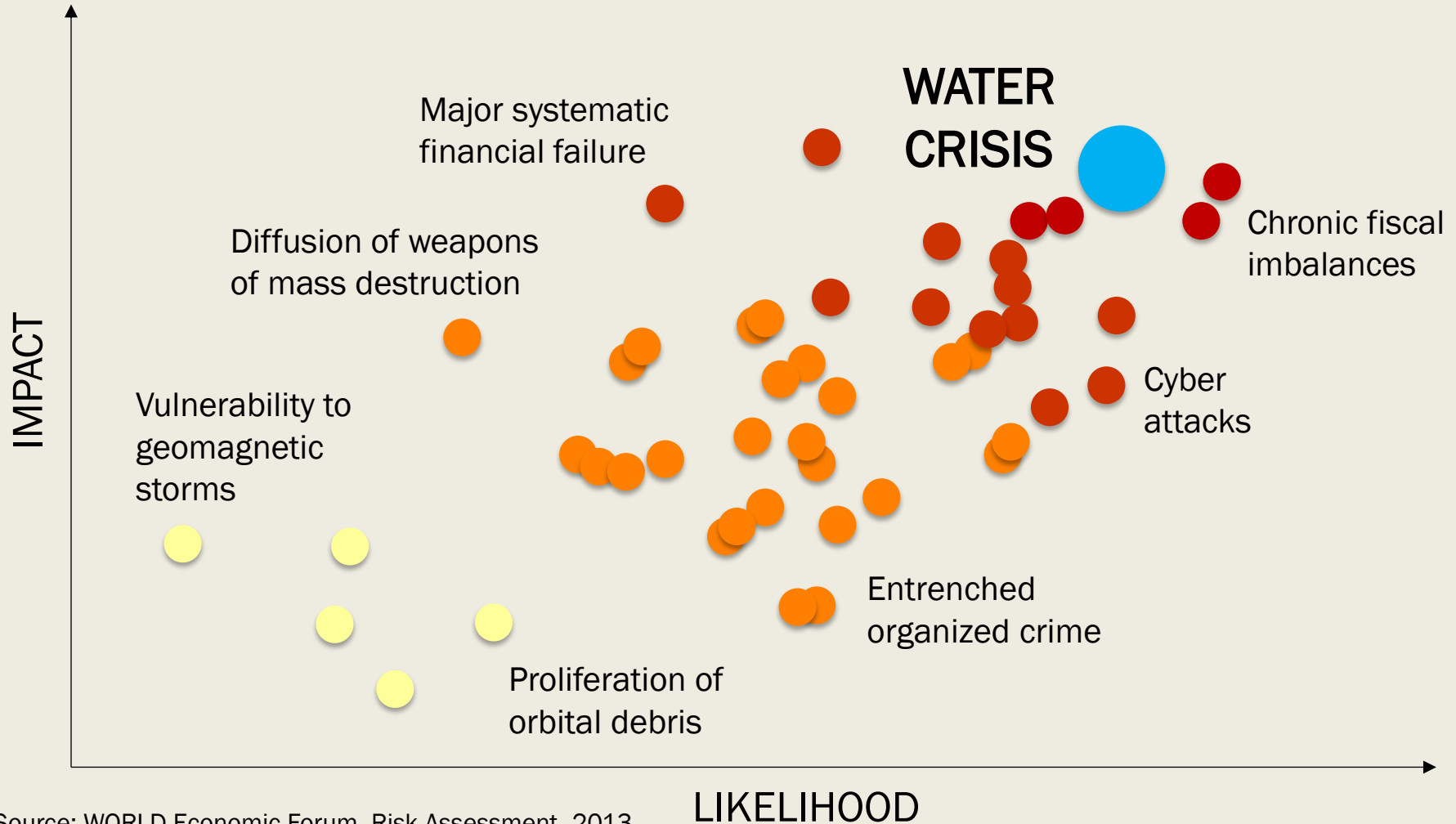


August 12, 2003



August 16, 2009

WATER CRISES ARE THE WORLD'S BIGGEST RISK



A grayscale topographic map of Earth, showing landmasses and ocean depths. The map is centered on the Atlantic Ocean, with North and South America on the left and Europe and Africa on the right. The terrain is rendered in shades of gray, with darker tones representing higher elevations and lighter tones representing lower elevations and ocean depths. A semi-transparent dark gray rectangular box is overlaid on the map, containing the text "A scarce resource...".

A scarce
resource...

THANK YOU