

How much rain 🌧️
can you harvest in
Knoxville, Tennessee?

Could it help prevent
🔥 wildfire damage?

Let's look at the last 30 years of data for Knoxville to see what the driest and wettest years were. We might be surprised by what we find.

Most homes, even in arid environments, do not put their rainwater to productive use. They let it run off the property, straight out to the ocean.

There is an opportunity to integrate **rainwater harvesting** into the design of new homes in Knoxville.

The driest year in
Knoxville in the last
30 years was:



815 mm
(32.09 inches)

The wettest year in
Knoxville in the last
30 years was:



1,706 mm
(67.16 inches)

This translates to:

73,350 litres

(19,303 gallons) of
harvest / 1000 sq. feet of
roof in the driest year

153,540 litres

(40,405 gallons) of
harvest / 1000 sq. feet of
roof in the wettest year

The average home size in Knoxville is:



2,052 sq. feet

This translates to:

150,514.2 litres

(39,609 gallons) in
the driest year

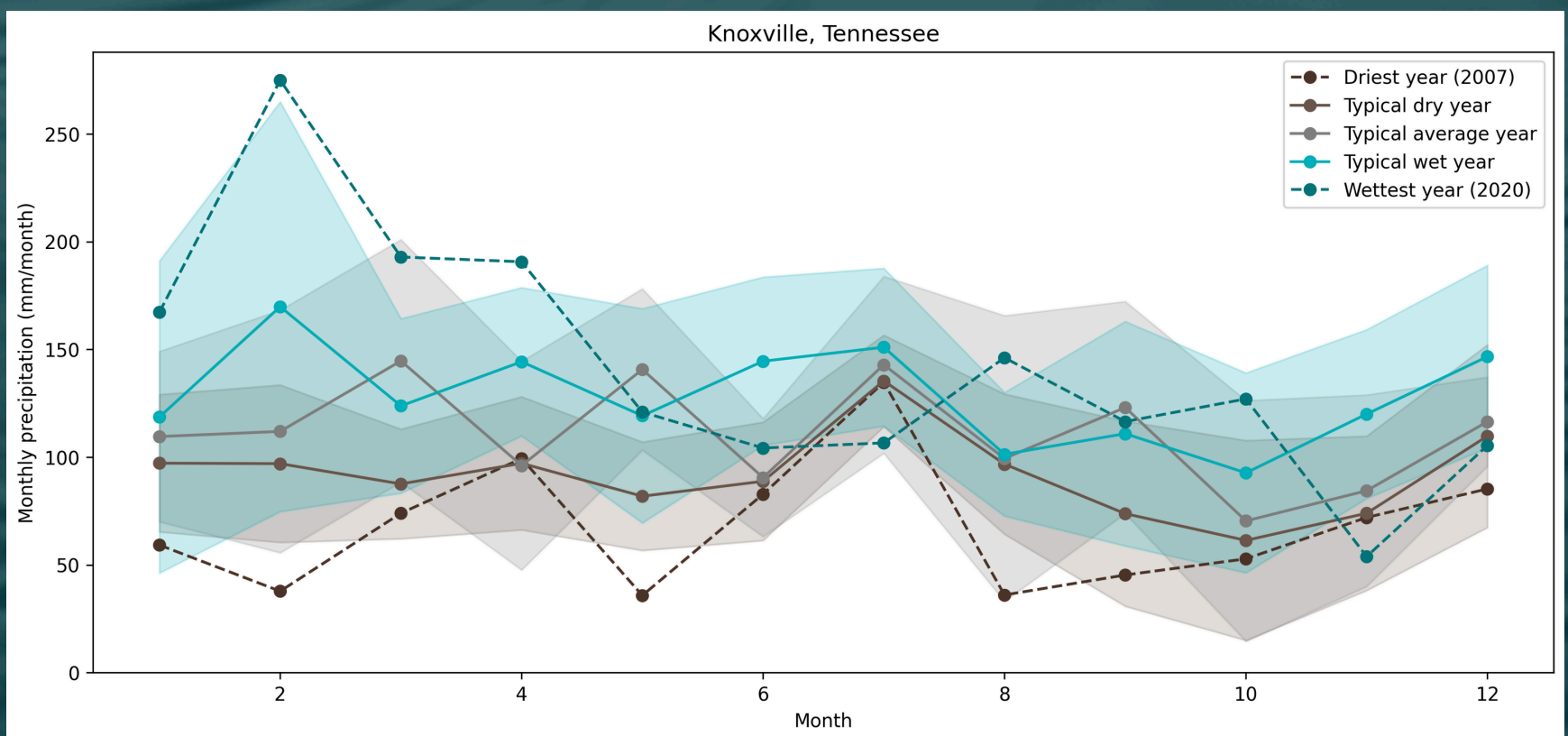
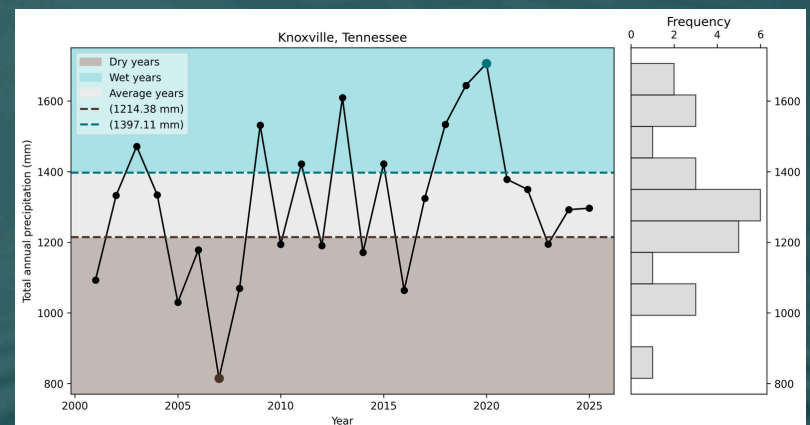
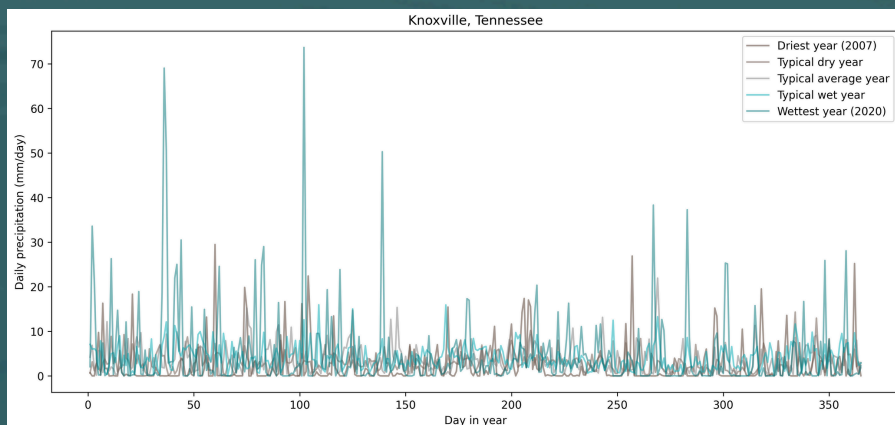
315,064 litres

(82,912 gallons) in
the wettest year

If we combined rainwater harvesting with a property-wide greywater reuse strategy, fire-resistant landscaping and fire-resistant building materials, we could bring the fire risk down substantially.

Greywater could be used to keep the fire-resistant landscape green and non-flammable year-round, and the rainwater could be stored for wildfire season as a backup measure.

Below are some charts the 5th World Data team put together to help understand the opportunity.



If you are in Knoxville and you are a building professional who wants to integrate these systems into your designs, please reach out at **www.5thworld.com/contact/**