



1
00:00:08,060 --> 00:00:04,030
[rain, thunder]

2
00:00:08,080 --> 00:00:12,080
[waves]
As humans, we're well

3
00:00:12,100 --> 00:00:16,100
aware we need water to live. Fortunately for us, we live on

4
00:00:16,120 --> 00:00:20,160
a water planet. But that doesn't mean we have an entire globe of H₂O

5
00:00:20,180 --> 00:00:24,180
to use as we please.

6
00:00:24,200 --> 00:00:28,230
So just how does the usable water break down for us?

7
00:00:28,250 --> 00:00:32,260
A giant 97 percent of Earth's water is in the ocean, so we can't

8
00:00:32,280 --> 00:00:36,270
use that. Three percent is freshwater, but even in that small

9
00:00:36,290 --> 00:00:40,300
sliver, about two percent is locked in glaciers, ice caps, and groundwater.

10
00:00:40,320 --> 00:00:44,340
That leaves about one percent of the freshwater on

11
00:00:44,360 --> 00:00:48,370
Earth that is accessible and usable by humans. Let's imagine

12
00:00:48,390 --> 00:00:52,400
all of that accessible freshwater fits into this tiny pool. Now we'll get to

13

00:00:52,420 --> 00:00:56,420

some small numbers when we look at global freshwater.

14

00:01:04,480 --> 00:01:08,480

[music]

15

00:01:16,590 --> 00:01:20,600

There really is a small fraction of usable and accessible freshwater on this

16

00:01:20,620 --> 00:01:24,650

water planet, so how do we use that tiny pool? In the

17

00:01:24,670 --> 00:01:28,670

United States, about 49 percent is used in thermoelectric power production.

18

00:01:28,690 --> 00:01:32,710

While agricultural irrigation makes up about 31

19

00:01:32,730 --> 00:01:36,710

percent. Eleven percent goes to public use in our cities and towns.

20

00:01:36,730 --> 00:01:40,740

Four percent goes into industry and manufacturing,

21

00:01:40,760 --> 00:01:44,750

and one percent is domestic use. The water coming out of our faucets

22

00:01:44,770 --> 00:01:48,800

largely comes from precipitation. Measuring how much or

23

00:01:48,820 --> 00:01:52,850

how little precipitation falls can impact how we live our daily lives.

24

00:01:52,870 --> 00:01:56,880

Elsewhere around the globe, in developing countries, agricultural irrigation

25

00:01:56,900 --> 00:02:00,920

accounts for about 70 percent of freshwater use,

26

00:02:00,940 --> 00:02:04,970

while industrial use is 20 percent, and 10 percent for public consumption.

27

00:02:04,990 --> 00:02:09,000

In places where access to usable freshwater is greatly limited,

28

00:02:09,020 --> 00:02:13,020

knowing when and where precipitation may fall is critical to livelihoods.

29

00:02:13,040 --> 00:02:17,080

Precipitation replenishes these tiny reservoirs of

30

00:02:17,100 --> 00:02:21,140

freshwater, and data from the Global Precipitation Measurement mission will help

31

00:02:21,160 --> 00:02:25,200

farmers, ranchers, and policy makers in these regions plan for

32

00:02:25,220 --> 00:02:29,250

periods of drought, flooding and other extreme weather.