Crucial FEWSION Episode 5: 'Trailer' – for 'Is My Burger Killing a River?'

Narrator (Diane): Rivers have become very depleted across the Western US in the last couple of decades – the Colorado River is a prime example of the emerging water crisis. Says Brian Richter – experienced water conservationist and FEWSION researcher…

Brian Richter: Over the last 20 years the river flows have been about 20% less than normal on average. Yet at the same time we've been taking as much water as we always have. And the only way that you can make that work is by dipping into your 'savings accounts' – that would be the big reservoirs.

N: Those reservoirs are getting low. The seven states that use the Colorado River's water agree they have to share the 'pain' of not having enough. Soon. In other words – all of us living in the region have to find ways of using less water.

B: There are a number of cities that are located within the Colorado River basin that are dependent on the flow of water there – Las Vegas; Grand Junction, Colorado. But then there's other cities that actually lie outside of that river basin, that draw water from the river and they transport it - Denver, Aurora, Colorado Springs – and then cities over on the western coast of the United States – Los Angeles, San Diego, they're all using the Colorado River's water, to some extent.

N: That's about 40 million people - along with a lot of really important farm land. But that's not the only concern…

B: There's a lot of different forms of damage that's resulting from the drying up of these river ecosystems. The native fish species that live across the Western US are becoming highly vulnerable to extinction.

N: By using the FEWSION project's spatially explicit data, researchers led by Brian Richter, were able to analyze how the river water is used – and what the consequences of that use are – with a quite remarkable level of detail. And ONE striking result…

B: Within the Western United States fully a third of all the water that gets used is going to the irrigation of cattle feed. Cattle feed crops clearly emerged as the most dominant driver behind the drying of these rivers and streams - the primary driver behind the water scarcity and the water shortage crisis that we're facing.

B: We found that there were more than 60 native fish species that are becoming highly vulnerable to extinction because of this depletion of the river flows that they rely upon. More than 50 of those 60 species, would be in trouble just from using water strictly for irrigating cattle feed crops.

N: The data shows that irrigating cattle feed crops is using a disproportionate share of the available water.

B: In the US as a total, the irrigation of cattle feed crops – which takes place mostly in the West, is about a fourth of all of the consumption of water within the United States.

N: Producing and supplying beef to a large metropolitan area adds up – to a LOT of water – this is how much…

B: If you take the cumulative consumption of beef products in Los Angeles, it's about half as much as the water that they take directly out of the river for their municipal water supply system.

N: But how to tackle this disproportionate use of water, without putting a lot of farmers and rural economies out of business?

B: If we could find some way of fallowing – meaning not growing the cattle feed crops, on about 20% of the farmland that's been producing those crops, we would be able to make a big dent in this water crisis in the Colorado River basin.

N: Farmers would agree to *voluntarily* – not grow a crop on that land for a year or two at a time – on a rotational basis.

B: We would financially compensate those farmers - pay them a price each year for not growing a crop – that would in most cases be more than they could make by actually trying to grow the crop.

N: Paying farmers to in essence 'grow' water – instead of crops – is one part of the solution.

B: If we're going to ask those farmers to fallow some portion of their land - we have to provide the funding.

N: But that solution also falls on the shoulders of all of the rest of us…

B: It has to do with our consumption of the products that require a lot of water to grow them. I think that more and more people are going to appreciate that eating meat … is something of a luxury.

N: To learn more – listen to the full episode of 'Is My Burger Killing A River?' which will be available here, as soon as the research paper is published, later this year.