

1. Sea Level Rise

Paulo woke stiff and sore. Too hot to sleep inside, but one more night on the concrete balcony of the abandoned luxury hotel, and he was sure he would walk with a permanent stoop, like his abuelo used to. He winced, recalling how the brutal storm surge from hurricane Elain had washed his tiny village away like so much driftwood on a raging sea.

“Vayan con dios, muchachos,” he said, blinking from the dappled morning light reflected off the greasy waves of the slowly retreating tide.

He donned his tattered cotton shirt. A small white tag still had the words “American Eagle” stitched on them, but no one he knew had any idea what that was. He placed a worn straw hat on his peeling forehead, and scrabbled his fishing kits together. There seemed little sense in heading out to sea again. Hadn’t even seen a fish big enough to eat in three days. But what else to do? Bake in the sun, waiting for the water to swallow the world?

2. Heat Wave

Once again, Allyah couldn’t sleep. Between the constant rattle of the electric fan, and the snoring of her father in the next room, she might as well be trying to sleep on the subway. Her sheets were soaked, and despite her constant sweating, the fan did nothing to cool her. It was at least 90 degrees in her room, even with the windows open. And the humidity made everything, even the walls and carpet feel damp.

But, it wasn’t the stifling heat or the noise keeping her awake. She was worried.

For the second time that summer, Granny was in the hospital. This time they had found her in the living room of their small 4th floor walk up when they came back from the corner market. Granny seemed to be asleep, but the way she was slumped half off the couch made Mama cry out when she saw her. Granny had stirred a little then, her voice hushed, and her speech slurred. Allyah couldn’t understand her. Mama sent Allyah to the kitchen for a glass of water, while she dialed 911.

3. Drought

Harrison had to drive slowly. The road through town was cracked and uneven. And the dust made it impossible to see more than 20 feet ahead.

Almost a decade ago a 10 foot hole had opened up beneath a city bus. Nearly swallowed it whole. When the state geologists said it was because the ground water was disappearing, everyone thought he was crazy. But now half the wells in the county had gone dry. Harrison was lucky, he had been able coax enough water from the family well to grow a decent crop of alfalfa.

As he climbed from the cab of his pick-up, he winced at the stinging sand and the wind that felt like a hair dryer. He pounded on the side of a dull metal water tank. A deep, hollow sound made his heart sink to his knees. He wiped the water level gauge free of dust. Empty.

4. Biodiversity Loss

With a swing of her machete, Maria cut the last tendril of vine holding up a mat of tangled branches. She could finally make out the trail again. She pushed past the relentless undergrowth and slowly made her way to the last little stream on her list. So far, she'd surveyed 25 almost identical little streams in Costa Rica, looking for the tiny, black and yellow harlequin frog. And so far, her only specimen was a dead adult covered in Chytrid fungus.

In the past 30 years, the fungus had all but wiped out the little frog. As it grew on the skin of an infected frog, the fungus slowly poisoned the poor animal until it died. The years of unpredictable weather seemed to weaken the frogs, leaving them vulnerable to infection, and more likely to die from the disease.

Exhausted, Maria slumped onto the rocky bank of the stream. All this work had been for nothing, she thought, not a single live frog in weeks of searching. She wiped sweat from her eyes and took a swig of the warm water from her canteen. Her eyes came to rest on a site that caused her heart to race. Stuck to the base of a smooth rock in the quickly moving water, was a cluster of tiny, round, jelly-filled dots. Carefully, Maria gathered them into a clear plastic sample jar. She held them to the light. Inside each tiny dot squirmed a living tadpole.

5. Extreme Weather

Richard looked down from the porch stoop, and sighed heavily. His snow shovel was going to be pretty much useless against this mess. Couldn't even see the cab of his pickup under all the snow, and what was he going to do if he did manage to dig it out? The street was completely buried. "Not gonna make it to work today," he thought, and then, "Hard enough to make ends meet without getting snowed in."

He turned and went back inside, pausing to shed his boots, hat and winter coat in the mud room. From the kitchen he could hear the weather guy talking about El Nino, and warm air masses and so on.

"Global warming, my foot!" he grumbled, shaking his head. Record snowfall didn't sound like the kind of climate change they kept talking about on TV. This was the third major blizzard in 5 years. Last time, he'd been stuck home without power for almost a week. Just then the voice on the TV stopped. Richard flipped the light switch in the kitchen up and down. "No juice," he thought, "Fantastic."