

MCC teacher and Mesa resident named state climatologist

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When Erinanne Saffell was a girl growing up in Mesa, she recalled, "I lived down the street from Mesa High."

"There were a lot of farms right next to my house," she said with a fond chuckle at her current home in east Mesa.

"I remember growing up with a horse farm right across the street from my house, and there was a lot of agriculture. I remember riding my bike to school, smelling the dairy farms along Stapley Drive."

Now, not so much. Many of the farms of her old neighborhood, like much of the agricultural land around the city, have been "flipped" to homes, shopping centers and warehouses.

The neighborhood where she now lives is a short drive from "Data Center Alley," the stretch near Eastmark that is soon to feature one big tech project after another.

"Urban heat islands" isn't just something she studies: she is living it.

Saffell, director of Mesa Community College's Geography program and an ASU professor, became Arizona's state climatologist last week. She was appointed by Gov. Doug Ducey, though she notes "the state climatologist is not a political position."

"This is a position that was initiated in 1973," Saffell said. "I'm the sixth state climatologist. I think I'm the only state climatologist that was born and raised in Arizona, so I'm very proud of that."

Her new position will involve "a lot of interaction with committees, on the city level, county level, state level and federal level. I am co-chair of the Arizona Department of Resources Drought Committee... Every year, we report to the governor our level of drought."

Saffell talked to the Tribune the same day the U.S. government declared the first-ever water shortage at Lake Mead, the nation's largest reservoir by volume. And the Bureau of Reclamation said it will cut Lake Mead water to Arizona by 18 percent.

Saffell said about 38 percent of the state's water supply comes from the Colorado River, which in turn runs to Lake Mead.

But she noted the cuts will impact farm-



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ers directly, not East Valley residents: "The majority of Colorado River water from the CAP (Central Arizona Project) is used for agriculture. The larger consequence for Tier 1 restrictions in Arizona will largely be felt in our agricultural fields."

While for many locals, monsoon rains bring welcome relief to the brutal summer temperatures, for the likes of Saffell, precipitation is a cause for celebration.

"Wow -- have we got a tremendously wet monsoon (season), that's thrilling," she beamed.

"Starting with July precipitation, we were able to adjust some of our drought levels and show improvements in some of our drought levels," she added.

"We've already seen how our exceptional rain this summer has helped mitigate some of the agricultural and ecological drought."

Even so, some long-timers gripe that monsoons ain't what they used to be.

Saffell listens, but takes a big-picture view. "I really value information folks can bring to me about their own history...But in Phoenix, since 1948 with monsoon seasons, it's been kind of flat. We're not really seeing any change...some years have nothing, like the 'nonsoon' last year. Then some years you have a lot."

At her comfortable home, Saffell sat in

front of a photo of a "supercell" taken by a student in a storm-chasing class.

Talk about a "perfect storm." She became the state climate guru the day after a disturbing report from the U.N. Climate Panel. U.N. Secretary-General António Guterres described the report as a "code red for humanity."

"The alarm bells are deafening," he said in a statement. "This report must sound a death knell for coal and fossil fuels, before they destroy our planet."

But Saffell didn't find the report "scary" or alarming.

"The report is kind of consistent with what they've been saying for a few years. It was not anything unexpected," she said.

"What I'm interested in (from) those reports is how they impact Arizona. They're looking at a larger scale."

She noted it is certainly getting hotter here.

"When we look at temperatures in Arizona, we can see over a longer period of time, the last 100 years, we've had an increase of about 2 degrees Fahrenheit in that last 100 years. I try to make sense of that, 'What does it mean?' ... I want to understand patterns.

"Are we going to be able to reach 130 degrees in Phoenix in the next 30 years? We probably won't."

Daytime highs are hardly the only thing Saffell studies.

Regarding the East Valley, "I was born and raised there. I can understand temperatures at night are warmer than they used to be. That's largely a function of the urban heat island," Saffell said.

After spending her early years in Scottsdale, Saffell came with her family to Mesa and graduated from Mesa High in 1984.

Most of her family still lives in Mesa, she said.

Her busy schedule includes teaching classes at MCC and ASU (she studied at both schools).

"Dr. Erinanne Saffell's decades of experience teaching and researching the pressing issues of climate we are facing, both locally and globally, have prepared her well to serve as Arizona's top climate expert," ASU President Michael Crow said, after Saffell's appointment as state climatologist.

"Her knowledge on topics like drought and extreme weather will help to advance a more sustainable and informed Arizona."

Indeed, Saffell said, "My earliest memories are flooding. I was born in Phoenix, then spent my first years in Scottsdale near Indian Bend Wash. I remember my family having to sandbag in 1970. Then with Hurricane Joanne in 1972 all the flooding was terrifying to me," Saffell said. Asked what the average person can do to reduce his or her "carbon footprint," Saffell advised: Make your own shade.

"We're in Arizona, so the thing that impacts us most is energy from the sun. So if you can block that in some way, your house isn't going to get as hot and you're not going to use as much energy to cool it. Shade trees- that's one helpful way. And some folks paint their roof white, so it bounces (sunlight) back out," Saffell said.

According to Reuters news agency, "Humans are 'unequivocally' to blame, the report from the scientists of the Intergovernmental Panel on Climate Change said. Rapid action to cut greenhouse gas emissions could limit some impacts, but others are now locked in.

"The deadly heat waves, gargantuan hurricanes and other weather extremes that are already happening will only become more severe." ■