Lanor Curole: Bayou Lafourche was my front yard.

[Soothing guitar music begins playing.]

Lanor Curole: So, winter months, I would wake up in the morning to the sounds of pelicans diving and feeding in the bayou.

Céline Gounder: This is Lanor Curole. She’s describing her childhood in Golden Meadow, Louisiana, a small bayou town about 50 miles southwest of New Orleans. It's right along the Gulf of Mexico.

Lanor Curole: Crickets in the evening, the fresh smell of grass cut in the summertime. ’Cause, golly, you gotta cut the grass almost every day — it grows so fast! Those are just such fond memories.

Céline Gounder: Lanor is a member of the United Houma Nation. She oversees the day-to-day operations of the tribe. But Lanor doesn't live in Golden Meadow anymore. Today, she lives in Raceland. It's 35 miles north of where she grew up. She misses the bayou.

Lanor Curole: I don't feel like Raceland is home. Golden Meadow is still my home. I still feel like that's where my heart is. I don't hear the bayou noises like I did further south. I'm not going to see pelicans 35 miles further north.

Céline Gounder: Rising sea levels and increasingly severe storms have greatly increased the risk of floods in the area. That raised the price of flood insurance premiums. Those costs are one reason Lanor left Golden Meadow.

Lanor Curole: I was going to spend just as much per month in insurance than I was going to spend in a house note. And I couldn't afford that.
Céline Gounder: Destruction caused by flooding was another reason.

Lanor Curole: Some of the things we're starting to see is for some of the low-lying communities is as we get more and more repetitive flooding, a lot of the infrastructure starts disappearing.

Céline Gounder: Damaged roads and school closures, environmental hazards, climbing expenses, and difficulty finding jobs that pay a living wage are all pushing Houma people out of the region.

Lanor Curole: The problem we have is with the land loss — all of the buffers that used to be in place, so a lot of the wetlands, the systems that would slow down a storm before reaching the inlands have just eroded away over time. And so there's nothing to now stop the force of the storm surge from reaching inland. It's coming on land at full force.

Céline Gounder: As a tribal administrator, Lanor works to help the community recover when climate disasters like Hurricane Ida strike. But often people’s needs are greater than the resources available.

Lanor Curole: It's just heartbreaking, and it's hard. It's hard being in a position of service to the community. And when you see folks and it’s like there's not a whole lot we can do.

[“American Diagnosis” theme begins.]

Céline Gounder: In this episode, we are exploring the effects of the climate crisis on the health of Indigenous peoples.

Shanondora Billiot: Climate change interrupts the expression of culture and the protective factors that culture and identity have on health.

Céline Gounder: How the increasing severity of climate change is affecting the Houma Nation.

Chief Thomas Dardar Jr.: We’re losing land here in Louisiana. Used to say a football field every 90 minutes; now it's quicker than that.

Céline Gounder: And how a lack of federal recognition for the tribe creates barriers to funding and services for the Houma.

Lanor Curole: Our people are on that front line, but we don't have a seat at that table.
Céline Gounder: I’m Dr. Céline Gounder. This is “American Diagnosis.”

[“American Diagnosis” theme fades.]

Céline Gounder: In 2005, Hurricane Katrina struck Louisiana, killing over 1,800 people and causing over $100 billion of damage.

Chief Thomas Dardar Jr.: After Katrina, half the houses floated away.

Céline Gounder: That’s Thomas Dardar Jr., a former chief of the United Houma Nation. For generations, members of his family have lived on a small bayou island called Isle de Jean Charles. In the aftermath of the hurricane, there were relief efforts. But Dardar says there weren’t many long-term solutions.

Chief Thomas Dardar Jr.: Then they brought in trailers to try to set them up on there. Then the next storm coming, we have to take all the trailers out because now they become projectiles. They're not anchored down. They're not situated where they can stay there long.

Céline Gounder: Many people who lost their homes in the storm were forced to relocate.

Chief Thomas Dardar Jr.: So, you went from anywhere from 200-300 citizens living on the island to now you're down to a handful, like maybe 25.

[Soft, intriguing music starts.]

Céline Gounder: While the community struggled to get back on its feet, another disaster, decades in the making, loomed.

Shanondora Billiot: So the oil and gas industry came with a huge presence in the 1930s.

Céline Gounder: This is Shanondora Billiot. She works as an assistant professor of social work at Arizona State University. Shanondora is a citizen of the United Houma Nation.

Shanondora Billiot: The oil field contributed greatly to land loss in Louisiana.

Céline Gounder: Louisiana’s coastal wetlands lose about 16 square miles of land each year. Experts say that drilling into the land to reach oil is accelerating this process. In addition to environmental destruction, oil fields also pose serious health risks. Living in close proximity to oil wells and refineries increases the population’s cancer risk. That's according to a 2021 report by the World Health Organization.
Céline Gounder: The Houma community was already worried about the risks of oil extraction and then disaster struck. In April 2010, BP’s Deepwater Horizon drilling rig spilled over 200 million gallons of oil into the Gulf of Mexico. It was just off the coast of Louisiana, and it was the largest oil spill in history.

Barack Obama: As far as I’m concerned, BP is responsible for this horrific disaster.

Céline Gounder: This is then-president Barack Obama addressing the nation after the oil spill.

Barack Obama: And we will hold them fully accountable on behalf of the United States, as well as the people and communities victimized by this tragedy.

Céline Gounder: The oil spill wreaked havoc on the United Houma Nation. It polluted the region, destroyed ecosystems, and threatened the livelihood of fishermen. But BP wasn’t required to pay damages directly to the Houma Nation. The reason? The tribe isn’t federally recognized. Tribal leaders say their status has become a barrier to getting the support they need to tackle climate emergencies.

Dan Lewerenz: These are extremely complicated and intensive applications. I recognize that it asks a lot of communities that often don’t have a lot of resources to put into that sort of work.

Céline Gounder: Over 570 tribes are federally recognized. The United Houma Nation and its 17,000 citizens are not among them. University of North Dakota law professor Dan Lewerenz said that means that the U.S. government does not see the Houma as a self-governing sovereign entity. The Houma first applied for federal recognition back in 1985.

Dan Lewerenz: Tribes must prove that they meet several criteria, including that their members descend from a historical tribe and that they are a distinct community.

Céline Gounder: It's a bit of a catch-22. If you create a rigorous process, it is going to make it that much more difficult for marginalized communities to meet the requirements. But if you don't create a rigorous process, then you are improperly lowering the barrier to what is a very solemn recognition and commitment.
Céline Gounder: When the Houma first applied, they were required to provide consistent documentation of their history. Tribal administrator Lanor Curole says this was a challenge.

Lanor Curole: So, for us, you have to recognize first contact is in the 1600s. And so to have a consistent timeline of written documentation is really difficult. You're hoping some white guy in 1800 thought you were important enough to write about.

[Bouncing instrumental notes sound and then fade to silence.]

Céline Gounder: In recent years the Bureau of Indian Affairs revised its recognition standards. Those changes could make the required paper trail less arduous for the Houma. Once the nation submits more supplemental materials, their application will be reviewed against the new standards. Lanor hopes it’ll be successful.

Lanor Curole: Federal recognition would give us a seat at that table to be a voice for our tribal citizens. With federal recognition, we could work directly with FEMA. There would not need to be kind of that in-between. So, I think that could take away a layer of bureaucracy. It's not like Willy Wonka’s ‘golden ticket’ of like, “OK, all of a sudden, we're in the chocolate factory and we have everything,” but I think it does open some additional doors that are definitely closed to us right now.

Céline Gounder: Lanor says not having federal recognition has hurt her community. Without that status, the United Houma Nation can’t form a government-to-government relationship, something that makes it harder to obtain federal funding.

Other tribes in the region that are federally recognized, like the Chitimacha, can. This gives them more tools to address climate pressures. In 2016, the federal government partnered with the Chitimacha to develop a climate adaptation plan. But even with that help, the threat looms large for all tribes along the coast.

[“American Diagnosis” theme begins.]

Céline Gounder: Lanor says the Houma weren’t prepared for the severity of the storms to come.

Lanor Curole: When Hurricane Katrina hit in 2005, I think we all thought, “Boy, that's the hurricane we're all going to mark time with. You know, before Katrina, after Katrina — that kind of stuff. And I think Ida has definitely changed that.
Céline Gounder: After the break, we’ll hear about the ways that Hurricane Ida swept through the Houma community.

[“American Diagnosis” theme fades, and soft instrumental music begins.]

Céline Gounder: On Aug. 29, 2021, almost 16 years to the day after Katrina, Hurricane Ida made landfall just 20 miles south of Golden Meadow. As locals were readying for the storm to hit, Lanor was worried about her family in the region. They didn’t want to leave their home.

Lanor Curole: I had to, like, beg my aunts who lived in Golden Meadow and say, “Please come stay at my house.” ’Cause they were going to stay. They were like, “Well, we've got these 10 dogs. What are we going to do with our dogs?” And I'm like, “Bring your dogs.”

Céline Gounder: Lanor convinced them to evacuate.

Lanor Curole: And thankfully they did because a portion of their roof came off.

Céline Gounder: Ida reached the coast as a category 4 hurricane, with 150 mph winds. The storm did a tremendous amount of damage. Lanor, in her role as Houma tribal administrator, set to work on relief efforts.

Lanor Curole: Even immediately after the storm, we had worked with Red Cross to pre-stage some supplies.

Céline Gounder: But Lanor could see that people’s needs went way beyond emergency snacks and toiletries.

Lanor Curole: We had people that lost everything, and I'm like, “What are we going to offer you, a Red Cross bucket? I'm not even going to insult you with that.”

Céline Gounder: Now, almost a year later, as hurricane season approaches again, many are still dealing with the destruction Ida caused.

Lanor Curole: You just still see damage after damage that just looks still untouched. And so we are years in recovery, and I just have never seen that.

Céline Gounder: In the face of worsening storms, the Houma people have come together.

Shanondora Billiot: There's been a lot of hurricanes, and every time citizens do what they have to do.
Céline Gounder: This is Shanondora Billiot again. She studies the effects of environmental changes on the health of Indigenous peoples in Louisiana.

Shanondora Billiot: They roll up their sleeves and build, rebuild, and help their neighbors and start over essentially. And they're deemed resilient for it. However, citizens talked about, “I don't want to have to be resilient.”

Céline Gounder: In the immediate aftermath of storms …

Shanondora Billiot: There's also incredible health risk of water- and vector-borne illness. After a hurricane in particular, it could be months before the city will lift the boil-water notice.

Céline Gounder: These crisis conditions pile up on top of historic long-standing barriers to food access.

Shanondora Billiot: There are very few grocery stores on the bayous. Many people have to drive 30 or 45 minutes to get to the closest grocery store with fresh fruit, fresh vegetables, because many people can no longer grow those vegetables on their soil.

Céline Gounder: In 2015, Shanondora surveyed 160 members of the United Houma Nation about their health and their experiences of climate change. She found that repeated exposure to environmental disasters has had a harmful effect on mental health.

Shanondora Billiot: They expressed a sadness among some people, similar to the expression of PTSD.

[Music fades to silence.]

Céline Gounder: Shanondora says federal recognition is one step toward addressing the health care needs of the United Houma Nation. As members of a state-recognized tribe, Houma people aren’t eligible for Indian health services.

Shanondora Billiot: There would be a more systematic access to health care if we were federally recognized.

Lanor Curole: That definitely would open a huge door for us.

Céline Gounder: This is Lanor Curole again.
**Lanor Curole:** Right now, we don't have access to Indian health services. So, our folks, our tribal citizens, are at the whim of whatever existing services are out there. It's months to get an appointment.

**Céline Gounder:** Communities that do have IHS clinics can also face long wait times for primary care appointments, but Lanor says additional service would be an improvement.

**Lanor Curole:** I've not heard some of the greatest stories about Indian health services, but I think it gives people choices where they may, in some instances, may not have enough.

**Céline Gounder:** Like many Indigenous peoples in the United States, Houma people are more likely to experience some health problems compared to the average American.

**Lanor Curole:** In particular we have some higher-than-normal diabetes rates, issues with heart disease.

**Céline Gounder:** According to a 2010 community needs assessment conducted by the tribe, just over half of United Houma Nation members live with cardiovascular disease.

Across the United States, American Indians and Alaska Natives are 50% more likely to be diagnosed with heart disease than white Americans. Social scientists in part connect these health outcomes to intergenerational traumas, including genocide and displacement.

Chief Thomas says there’s a long history of Houma people being driven off their land.

**Chief Thomas Dardar Jr.:** We've been thriving and living there for hundreds and hundreds of years. We lived off the land. We're able to supply and take care of ourselves. And as the Europeans kept encroaching and coming in, we kept going further and further south to evade and get away from the Europeans.

**Céline Gounder:** Today, climate change is forcing the Houma to move again.

**Chief Thomas Dardar Jr.:** Well, they’re in the process, unfortunately, of having to relocate the area where our people have lived for hundreds of years due to the land loss, sea level rise.

Don't come here and try to tell me it's not real. Don't try to convince me that the sea is not rising. And don't tell me that the land is not being lost. I see it, I live it, and I breathe it.

**Céline Gounder:** Despite the risks and obstacles, some Houma people are determined to stay.
Chief Thomas Dardar Jr.: And they're not going to leave. The only way they're going to leave is going to be in a pine box.

[Solemn music plays softly.]

Céline Gounder: Even though rising insurance costs forced her to leave Golden Meadow, Lanor Curole still has deep ties to the place where she grew up.

Lanor Curole: I probably will never move back to Golden Meadow. That's not, I think, reality for me or my brother or my sister.

Céline Gounder: Lanor and her siblings don’t live in Golden Meadow anymore, but they still own their childhood home.

Lanor Curole: The debates we are having is none of us are willing to let go of that property because we know what it meant to my mom and because what we also know is so many Native families lost their property to land manipulations and those kinds of things. I don’t feel comfortable selling it because I think we were a family that was lucky enough to keep it.

Céline Gounder: But losing her childhood home to flooding isn’t what upsets Lanor most.

Lanor Curole: My worst fear has always been after a storm or water ever getting into our family cemetery and finding my family displaced and having to rebury them. And my mom and my grandparents are buried there. My dad's buried there. You know, it’s generations of family in that cemetery.

Céline Gounder: Constant flooding in the area leaves graves vulnerable.

Lanor Curole: You can't bury the dead very deep because you dig a little bit and you’re hitting water fairly soon. And so when water comes in, often, unfortunately, a lot of graves will pop up and sometimes they float. Some of them float and move, and they will get shifted out of place.

Céline Gounder: On top of losing land and homes, the graves of deceased loved ones are being disturbed.

Lanor Curole: Right smack in the middle of all of our family community is a family cemetery. I've seen other families have to go through that, and it's like how absolutely heartbreaking to have to do that over and over again.

[Solemn music fades.]
Céline Gounder: Chief Thomas Dardar told us that years ago he would visit his aunt at her home on Isle de Jean Charles, the small island that is rapidly disappearing into the Gulf of Mexico.

Chief Thomas Dardar Jr.: To see that this island used to be 6, 7, 8, 10 miles wide reduced now to a quarter-mile is really disheartening.

Céline Gounder: Thomas and his aunt would go for walks, stopping to catch fish and crabs together.

Chief Thomas Dardar Jr.: She said, “Come on, walk with me.” I said, “All right.” So we went across the street. She pulled a crab trap up. She had some crabs. So we walked back — she threw her trap back down. She had a trout line, and she took the fish off the line — she didn't let that go back. So she took the fish off, and she brought it inside. And then she went into the garden outside, and she broke some okries and some beans. “Now we're going to have fried fish tonight for supper. And we're going to have some green beans and some okries, too.”

Céline Gounder: Throughout Chief Thomas’s life, Isle de Jean Charles has lost over 98% of its land mass. Its residents are being resettled further inland.

[Soft instrumental music begins playing.]

Thomas’ aunt — who has since passed away — used to worry about the resettlement and what she’d lose if she left her home. On the island, she could get around on foot, barter and share with neighbors, and live off the land.

Chief Thomas Dardar Jr.: So she said, “Where can I do that in town?” when they were talking about the relocation.

Céline Gounder: As climate change forces Houma people from their land, Chief Thomas wants to make sure he can share this way of life with the next generation. So he goes on walks with his 4-year-old granddaughter to keep her anchored to the land.

Chief Thomas Dardar Jr.: While we're walking, we’re talking and we’re pointing out things. And she’s learning while we walk. I’m trying to pass our culture on to her so that she can become a strong Houma woman when she gets of age. [Chief Thomas chuckles.]

So we're going to stand strong, and we're going to teach our young people to stand strong and move forward and hoping that we leave something for them.
[Soft instrumental music fades, and the “American Diagnosis” theme begins.]

Céline Gounder: This season of “American Diagnosis” is a co-production of Kaiser Health News and Just Human Productions. Additional support provided by the Burroughs Wellcome Fund and Open Society Foundations.

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I'm Dr. Céline Gounder. Thanks for listening to “American Diagnosis.”

[“American Diagnosis” theme fades to silence.]