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later, alarming reports painted an even bleaker picture of Earth's climate future, and yet the solutions remained elusive.

Even today, he said, with a quick Google search of "climate change solutions," the top results list actions such as upgrading your electronics and moving closer to work.

"Move closer to work - people say, 'I'll do it, but it's not going to make a difference,'" Hawken said. "People don't see climate change as an opportunity."

That paired with alarmist headlines about sea level rise, ocean acidification and the other devastating impacts of global warming, and the result, he said, is that people are left feeling helpless and guilty.

"Here we are, 40 years into the greatest crisis humanity has ever faced, and we have no plan," he said.

Not only was there no plan, but the goals of stabilizing carbon emissions and mitigating the impacts don't go far enough.

"If you're going the wrong way," Hawken told the room, "you have to stop *and turn around.*"

That's why the solutions outlined in "Drawdown" aim not only to reduce the world's greenhouse gas emissions, but also to take carbon out of the atmosphere and put it back in the Earth's storage reserves, where it belongs.

"We can only bring it back through land use," he told the room.

Turning idle landscapes into carbon sinking machines through afforestation and silvopasture and utilizing carbon-thirsty plants such as bamboo are just some of the land-use solutions on the list. Protecting tropical and old-growth forests and coastal wetlands is also crucial, according to the Drawdown team.

Every year, as spring and summer spread across the Northern Hemisphere, plants reduce the amount of carbon in the atmosphere by about 6 to 7 parts per million as they sprout leaves and conduct photosynthesis. Hawken illustrated this point by showing a dramatic time-lapse video that showed how CO2 builds up in the Northern Hemisphere over the winter before it begins to draw down in May.

You can view the video, "A year in the life of Earth's CO2," on NASA's website, nasa.gov.

The Drawdown team forecast three possible scenarios their plan could take.

The earliest Earth could expect to see a decline in the overall accumulation of greenhouse gases in its atmosphere would be in 2045, according to the "Optimum Scenario." This is the most aggressive scenario and would require 100 percent worldwide adoption of renewable energy by 2050.

On April 27, U.S. Sen. Jeff Merkley of Oregon co-introduced a bill that would transition the United States to 100 percent clean and renewable energy by 2050. However, it's largely symbolic because the Republican-controlled Congress is unlikely to pass it.

The team's "Plausible Scenario" used a "reasonable yet optimistic" forecast for the solutions' global growth rate. In this scenario, Earth would not achieve drawdown by 2050.

But, when the conservative bias is removed, the "Drawdown Scenario" has greater potential. In this scenario, transitional energy sources such as biomass, landfill methane and nuclear would still be in play in 2050, but electrical energy generation would be 100 percent renewable. While the team calculated drawdown of greenhouse gases would be possible, it said there are also too many unknowns to be certain.

How much carbon the oceans will continue to sequester as acidification increases and how much carbon forests will release if rising temperatures cause them to dry out are just two factors that will affect the outcome of the scenarios.

But emerging technologies and innovative ways of sequestering greenhouse gases that are as of yet undiscovered will also play a role.

Hawken ended his presentation at Ecotrust with a quote from the 2015 blockbuster movie "The Martian."

The quote comes from Matt Damon's character as he's teaching future astronauts in a classroom setting. He tells them that when they go up into space, at some point, everything will go terribly wrong.

"You solve one problem, and you solve the next one, and then the next," Damon told them. "And if you solve enough problems, you get to come home."

After reciting the quote, Hawken looked out over his audience and said, "And that's what we're doing."

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Mom

by Eileen Vizenor

It has been thirty-eight years
Since I've seen your pretty face.
You have been missed dearly,
Not only by your daughter and sons,
But by the lives you touched as well.

The fourth of May each year I am
Reminded of when I lost my best
Friend. I cry.

Then happier times flood my memory,
And laughter replaces tears.

The sacrifices you made for your
Family have never been forgotten.
Nor will they.

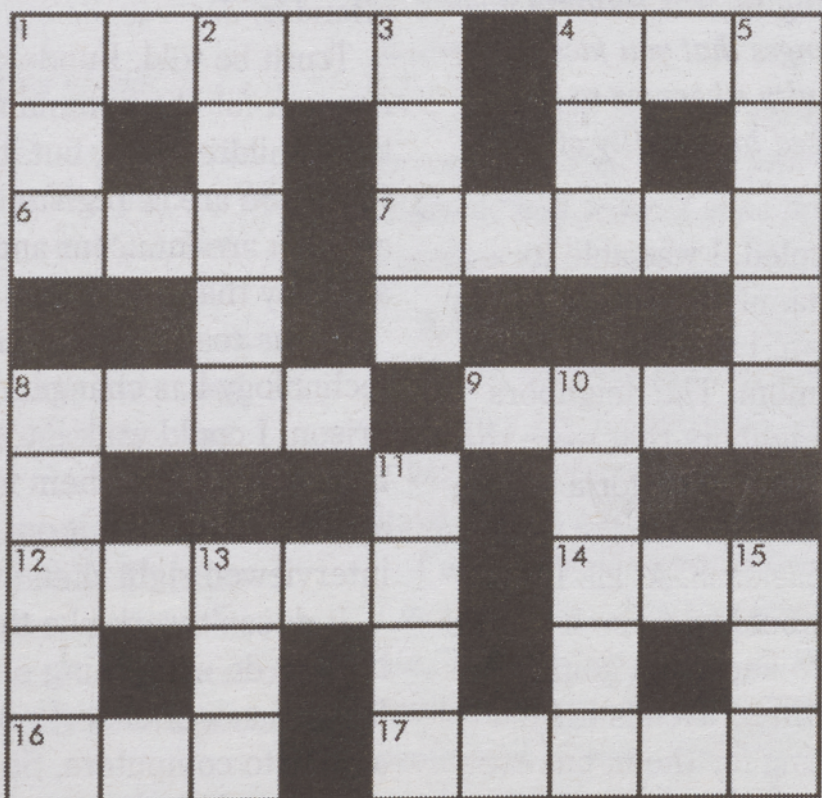
Mom, each day I thank you, love you
And miss you.

Rooted

by Jaison Kirk

Street Roots is a family by my side
With my fellows I do confide,
Letting out what's inside
Smiles and knuckle bumps greet
Whoever looks inside
From the past I no longer wish to hide
Rooted in place, the sea of humanity
comes like a tide
Torn clothes or worn shoes
I stand with pride

**WOODOOO
DOUGHNUT
CROSSWORD PUZZLE**



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ACROSS

- 1. Fermentation agent
- 4. Have a bite
- 6. Tree fluid
- 7. Cake ingredient
- 8. Three-ply cookie
- 9. Hook's henchman
- 12. Ground grain
- 14. The gift of ____
- 16. Tease or ridicule
- 17. Francis or Kevin?

DOWN

- 1. Affirmative!
- 2. Type of fritter
- 3. Analyze or try
- 4. Cake ingredient
- 5. Tres
- 8. Deal
- 10. Potter's practice
- 11. Nosh!
- 13. Late rapper; abbr.
- 15. ____ appetit



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