Jenna Kay

From: Monica Zazueta <zazuetamonica0813@gmail.com>

Sent: Thursday, August 15, 2024 4:19 PM

To: Jenna Kay; Amy Koski; Ben Duncan; sylvia@mosaicresolutions.com; Dana Hellman;

Harrison Husting; tlunsford@parametrix.com; Nicole Metildi

Subject: 9 Planetary Boundaries

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Understanding the fundamentals of why the oceans, the land systems and the ice sheets function as cooling systems on planet Earth that can buffer stress and help us to keep temperatures at a livable level.

Think of planet Earth like the organs in your body. Keeping the earth healthy is keeping us healthy.

9 Planetary Boundaries

These are global systems that connect the entire planet.

- 1. A stable climate system,
- 2. A stable ocean system,
- 3. Stratospheric ozone layer.

Biosphere boundaries, think of them as the nature boundaries. They work under the hood of the planetary machinery to keep the system intact.

- 4. Biodiversity, all the species. We now scientifically know that the richness of nature, the diversity in nature gives resilience and strength for carbon uptake, for moisture recycling, for the whole turnover of materials in the organic system on planet Earth.
- 5. The hydrological cycle, the bloodstream of the whole planet. Without fresh water, there is simply no health in the whole system.
- 6. Land system configurations. We depend disproportionately on certain big land systems. The Rainforest, the Tempered Forest, The Boreal forest. These are fundamental regulating systems in the whole Earth system.
- 7. Nutrient cycles, nitrogen and phosphorus.

8. Created by us humans.

Novel entities. Nuclear waste, microplastics, persistent organic pollutants, endocrine disruptors are compounds that we are loading into the biosphere that never existed and they are just accumulating and they could threaten life on Earth.

9. Aerosol loading. We are polluting the air at the lower atmosphere. Think of the smog in cities, it creates a dimming of the whole Earth system, which changes the energy balance because it becomes a reflector

of incoming solar radiation. It changes the monsoon systems. It's actually paradoxically a cooling factor on planet Earth. It's a huge environmental problem because it's having massive human health implications.

If we can be good stewards of these nine planetary boundaries the we have a good chance of keeping our planet at this desirable state for us humans.

(My Signature \bigcirc)



~You must always be willing to truly consider evidence that contradicts your beliefs, and admit the possibility you may be wrong. Intelligence isn't knowing everything, it's the ability to challenge everything you know. Let's all give up our fear as a justification for not to take action because we are the creators of our reality.

Sending healing vibes Monica Zazueta Concerned Mum





360-723-7707

Sharing energy,

1.

Doughnut Economics 7 Ways to Think Like a 21st Century Economist by Kate Raworth

Free digital copy of the book,

https://fenix.tecnico.ulisboa.pt/downloadFile/845043405579281/Raworth%20%282017%29%20Dough nut%20Economics.pdf

2.

29 minute video explaining Doughnut Economics

"How radical ideas can turn into transformative practice. Stockholm impact week 2023"

https://youtu.be/gwyzsAWRMcw?si=Hut8czYBLqAjOBpb

3.

Nate Hagens: "Episode 100 - The Great Simplification"

https://youtu.be/GocuMZX3hls?si=impadsCjN-aGZzk0