PLEASE NOTE: This transcript has been auto-generated and has not been fully proofed by ISEOF. If you have any questions please reach out to us at info@thegreatsimplification.com.

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[00:00:16] Just getting the NDCs, just checking that box, is not going to get the planet back to a safe operating space, right? You'd need major food transformation. You'd need, you know, circular economy, production, consumption pattern changes, you need energy transition. All of these together are the only thing that's going to get us back to a safe operating space for humanity.

[00:00:40] Nate Hagens: Today's kind of a special short episode announcing the Planetary Health Check. With me is my friend, Kerry Stover, who Rockström and other members of the Planetary Guardians recently in New York City Climate Week announced the planetary health check and Carrie is a social entrepreneur and strategist with extensive experience in global health development, international relations and planetary systems.

[OO:O1:11] She's currently a PhD student at Georgetown university doing systems change in the context of the poly crisis. And today we discuss the recently announced planetary health check and. Her hope, and the hope of the Planetary Guardians, is to spark a movement encouraging everyone, everywhere, to understand the planetary health situation, and become planetary guardians.

[00:01:39] Please welcome, Carrie Stover. Hi Carrie, welcome, great to see you.

[00:01:45] Kari Stoever: Hi Nate, good to see you too.

[00:01:46] Nate Hagens: I will say this on the record, you've been very helpful recently with introducing me to a lot of scientists, Johan Rockström and others, and your work on Planetary Guardians, Planetary Health Check, which we're about to discuss is really important, so thank you for all that.

[00:02:02] Kari Stoever: It's been my pleasure, Nate.

[00:02:04] **Nate Hagens:** So we're here in New York. You just yesterday launched the Planetary Health Check initiative. Could you describe the genesis of that and what it is and why it's important?

[00:02:15] **Kari Stoever**: Sure. Well, we consider it to be the most comprehensive look at the health of the whole planet. So it includes climate, includes oceans, biosphere, nitrogen, phosphorus flows, the nine planetary boundaries.

[00:02:28] And our ambition is to do this health check. Every year. So I have a background in, in health, human health. And we've decided to use the analogy, we're sending the planet, to the doctor every year. And even more importantly, I think, is, how frequently we're monitoring these vital signs. The pace of scientific measurement is not keeping up with the pace of planetary changes.

[00:02:52] So we're going to harness all the technology we can from satellite and AI, all the advanced modeling work that's being done, aggregate it and give the planet a full checkup every year. So that's the ambition. And this was the first one that we've done. The other planetary boundary assessments were about once every seven years, the IPCC reports about every seven years.

[00:03:15] So again, we're trying to really ramp up the frequency because of the state of the planet.

[00:03:21] **Nate Hagens:** So tell me what we're looking at here on this horizontal scale of planetary health. What does this tell us?

[00:03:28] **Kari Stoever:** Well, we're getting a readout on the nine biophysical processes that regulate the stability of the planet.

[00:03:34] and The paper that was published last year showed that six of the nine boundaries have been breached. We're out of that safe operating space for humanity, and we're dangerously close to the seventh, which is oceans. Right now we're just measuring ocean acidification. We know we need to look at other control variables to give a better sense of the health of our oceans.

[00:03:54] But that one is very close to a breaching point. This puts us farther and farther outside a safe zone for humanity. The trend over the last 15 years of measurement has been in the wrong direction. I'd say the only one that's really made progress and is holding steady is the ozone based on the work sometimes passed.

[00:04:12] **Nate Hagens:** So what do you hope to accomplish? What's the best case outcome with this initiative?

[00:04:17] **Kari Stoever**: Yeah, well, the first is really getting people to understand that the Earth is a living system and that these subsystems of the planet are all deeply connected. And these feedback loops, we need to understand them better, negative and positive.

[00:04:32] So being able to help people understand it's not just climate, this sort of amorphous thing out there in the, you know, in the atmosphere, but it includes all the systems of the planet that we care about. The second is Obviously the state, which is not a good report card. We'd probably put this patient in the intensive care unit if it were a human.

[00:04:53] So the planet is showing signs of diminished resilience and stress, and we're seeing this, whether it's the temperature anomalies in the ocean or any of the other indicators that we track on a regular basis. But more importantly than the diagnostic, because again, imagine you go to the doctor and he says, well, you have an, you know, a 20 to 80 percent chance of dying in the next five years.

[00:05:16] That's not very helpful information. So just telling the story of the diagnostic is not enough. We know that we want people to pay attention to that, but what we want to do with data and for the first time really can do with the tools is to turn that into insights. Right? So give as much real time update as we can.

[00:05:33] Again, this is the real earth observation, explosion and data, Al being very important here. Do trend analysis, hotspot, because at the global level, it's important to know what is that status, but decision making is local. So you've got to bring the planetary boundaries into a local context and understand they'll be wildly different depending on where you're looking.

[00:05:53] So we have to bring that level of resolution into local context to empower decision making, whether it's industry or governments or individuals. That's the next phase, which is really the exciting phase is to. Build these large data lakes, have all these data aggregated, create the tools and platform so that anybody, any citizen, any person can go in and do a deeper dive on either where they live or a particular boundary domain.

[00:06:20] Ultimately, what we want to do is build a planetary simulator. And this is what we would call the ultimate tool so that you can understand the externalities. What sort of tradeoffs are you making by having the nine boundaries? We have a broader lens, as you call it, to look at the impact on water. Look at the impact on biosphere.

[00:06:41] So You know, classic example of what's happening in the DRC with cobalt, right? For batteries. Like we can't destroy the biosphere to try to get the renewables, right? You know, so a lot of these externalities aren't being captured. We want to be able to build a simulator that says, okay, put this much investment over here, look at its impact on water, look at its impact on waste and go from there.

[00:07:05] **Nate Hagens:** Similar to a doctor especially in the United States that, you know, you go and you've got high blood pressure pre diabetes and high cholesterol, there's an underlying metabolic syndrome. And so is one of the implications of the planet is that humans have a metabolic syndrome and all these things are interconnected.

[00:07:25] Is that can that be inferred from, this data?

[00:07:29] **Kari Stoever**: Absolutely, it's inferred. And they're underappreciated feedback loops, right? And they're also not that well understood. Still, there's a lot of science to be done. We hear a lot from people. Don't we know enough? We just need to do more. And we're constantly reminding people, No, we don't know enough.

[00:07:46] The uncertainty ranges saying the tipping point science are too wide, right? So if you knew you were going to die in five years or one year, It would probably impact how you live today. We've got to reduce those uncertainty ranges

to know what risks are coming, when, and how big. Things aren't going to just tip all of a sudden and one day to the next, you know, be different, but it's like the boiling frog, right?

[00:08:12] Nate Hagens: Yes and no. If you were just the head of this initiative I might not ask you this, but since we're friends, I feel I can ask you this. I think many of us operate under this flawed assumption of information deficit, that we just need to get more information out there and then people will do the right thing.

[00:08:32] And we have a conversation next week about how to deal with climate change and global warming. So I think that this is a really important tool because what it does it's, it won't be sufficient, but it normalizes these conversations with more people. They can refer to the 2024 or 2026 planetary health check.

[00:09:12] And it's something that bubbles up in the zeitgeist of more people's references and conversations. What do you think about that?

[00:09:20] **Kari Stoever**: Absolutely. I also think that, you know, traditionally, even if you think about the way that we present the planetary boundary data and the spider diagram, it's not intuitive to most people.

[00:09:29] They know it's not a good thing because they see red, and red is typically that indicator of warning, but You know, by building these tools and inviting people into the data in a way that's very accessible and helps them with decision making, even just bringing visibility to the invisible can be very powerful.

[00:09:47] So it's not just the problem, it's what insights you can get from understanding it better.

[00:09:52] Nate Hagens: It's not just the science, it's the science communication and visualization to make it accessible. Yeah. What about if the If everything accelerates on the current trend and 2026 is worse than 25 and every year gets worse, have you thought about, like, the planetary health check as just kind of a depressing buzzkill for people around the world following it every year?

[00:10:17] **Kari Stoever**: I mean, we do hear a lot that people are eager to know that, but they quickly want to transition to what, can I do? Where's my agency as

an individual, as a corporation? And I, do think there is a, as much data as we have, I think there's still data vacuums, especially when it comes to understanding the interdependencies of the boundaries or the whole earth approach, I should say.

[00:10:40] So, At one level, I think we can't just leave people hanging on a bad news story. We have to empower them. There's still a lot of education to be done across the board with the people that we would call in the know. Just getting the NDCs, just checking that box is not going to get the planet back to a safe operating space, right?

[00:10:58] You'd need major food transformation. Circular economy, production, consumption pattern changes you need. Energy transition, all of these together are the only thing that's going to get us back to a safe operating space for humanity. So we still have a lot of challenges within this space from a comms perspective, really understanding what is the solution.

[00:11:19] We're just going to double down on energy transition biosphere. That's not going to help us. So it's been somewhat muddled by the history of the way that these movements have come about and we're hoping to sort of pull things back together into a holistic approach.

[00:11:36] **Nate Hagens:** Well, there's something happening in my conversations in my travels and my network.

[00:11:42] Something just the last few months is happening with a change in consciousness. But let me ask you this. While you were speaking, I thought of this Sci fi cartoon I saw on Twitter. I can't remember what it was. People from the future wanted to come back to 2024 and warn people about what would happen to the biosphere and the planet.

[00:12:04] And they're like, we went back in time to change the future, but people just, they didn't care. They didn't change. They didn't do anything. So I wonder if there's like two groups of people that the information deficit has a different response. There are certain people that, just don't care or they're too stressed in their daily lives that they're just have cognitive overload already.

[00:12:26] There's another universe of people, I assume is your audience, that are unaware and really pro social, pro future, want to play a role in changing things that need this information and context. What do you think about that? I mean, to me, it's just, It's clear that we need to have a values and consciousness shift and the energy transition isn't really about good energy and bad energy.

[00:12:54] It's about how we use energy differently and how we change our relationships with ourselves and our relationship to the natural world. What are your thoughts on that?

[00:13:03] **Kari Stoever:** Well, I completely agree with you. And I think the human challenge, I think it was Joseph Nye in The Future of Power who said that, you know, I would, these are my way of repeating his quote, so not his quote.

[00:13:17] Today, the commodity that we're all after is people's attention, right? So I tend to be an optimist that people care and care deeply, but they're not awake to it. You know, and awake to the changes that, need to take place at a systems level and whatever role the individual can play in helping make that system change, like voting right now in the United States, very important for the planet.

[00:13:43] So, I mean, there are things that each of us can do. Reduce our footprint, you know, all the things I think we know sort of intuitively, but until the systems start to shift, which is really probably a massive shift in consciousness about the importance of why it has to, I mean, humans did design these systems.

[00:14:02] So we've got to wake into what the next new set of systems will be to help us live. Cohesively with each other and the planet.

[00:14:11] Nate Hagens: You and I've been at a lot of meetings and presentations this week. and actually I'll share cause I was, I was with you when Jane Goodall finished the planetary guardians announcement of the planetary health check.

[00:14:27] She said, that all these discussions about the importance of protecting the biosphere and the planetary health check for human civilization, for human society, didn't mention the non humans. And then she gave a chimpanzee vocalization to close the meeting. I teared up. It was like unbidden all of a sudden.

[00:14:47] And I feel that one of the challenges is that there's so many capable, pro social, amazing humans that are becoming aware of these things. And there's three potential hats. One hat, unfortunately, is they have their, bills to pay, their rent to pay, their bosses, their jobs, their profits, their company, whatever it is.

[OO:15:08] The second is they want to enjoy life and have fun and see beautiful things. And the third is they want to be good ancestors and do the right thing for the future of not only our species, but other species. Our system doesn't allow people to wear all three of those hats at the same time. And that's the problem is people increasingly want to do that third hat, but the first they're wearing the first hat is primary and they have to do the things that feed into the economic superorganism.

[00:15:37] So I'm hopeful that your new initiative is one of those tools that's. And I think it's really important that we keep our focus on that. You know, I

[00:15:49] **Kari Stoever:** think there's a lot of potential in the way that we think about it. The way that we think about health information and consciousness. Like, we're we're we're facing challenges of health information right now.

[00:16:08] Right? Even just what you mentioned with Jane, you know, and, I don't think I've ever heard her talk in, you know, live in the last, since we've been working with her as a guardian, where she didn't make me tear up as well because her wisdom is so profound and her love is so profound and her hope is so profound.

[00:16:24] And we're so hungry for that. You know, we need the Janes going out. She travels 300 days a year and she brings hope everywhere she goes despite what's happening all around the world that she sees and she's been, you know, really at the front lines her whole career. So I'm inspired by that, but I do think that, you know, this relationship we have with each other, with the planet, with all species is really a worldview problem.

[00:16:52] You know, I was reminded thinking about coming here, you know, I've heard from reading about the astronauts journeys, people in space, when they look at this beautiful planet, how there's a switch,

[00:17:02] Nate Hagens: the overview effect.

[00:17:04] Kari Stoever: it changes their worldview.

[00:17:05] Nate Hagens: Yeah.

[00:17:06] Kari Stoever: All of a sudden, it's just this perspective just comes alive.

[00:17:09] And you know, how do we do that? How do we do with data? How do we do it with science? How do we do it with new tools? How do we do it with connected communities? How do we do it with the Jane Goodall's do three things, you know, which she tells all her roots and shoots groups around the world. we need that sort of bubbling up of that community movement.

[00:17:28] Nate Hagens: What are the three things she says?

[00:17:31] **Kari Stoever**: One was do something for People, animals and some like service. I'm probably botching it up exactly, but she's encouraging people to connect and to connect around things that matter, which is each other species and to be of service. And it's taken off 70. I think she just said that 71 countries now where she has roots and shoots.

[00:17:54] So this is my hope, right?

[00:17:57] **Nate Hagens:** So what is what is your recommendation? I know this is kind of a PSA for your new initiative, but since you're a watcher of the show, you know, some of my closing questions. What advice do you give to people listening to this show that are aware of the tipping points the thresholds, the economic, political, the whole thing?

[00:18:20] do you have any personal advice?

[00:18:22] **Kari Stoever**: Personal advice or, you know, one, the science isn't done. So we need to keep our foot on the pedal. Um and I think that the ability to harness a lot of the new technology out there for the good of the planet is something that we want to be able to embrace and use effectively.

[00:18:42] and, you know, we're always looking for partners. We need partners across, you know, communications, science partners, technology partners, funding

partners. We want to be interacting with more governments, more industry involvement, so it's a wide net. so I invite everybody into the tent who wants to be a part of this.

[00:19:03] Nate Hagens: And how do they find out more about this initiative?

[00:19:07] **Kari Stoever:** So we have we just launched a website. It does have the report you can download. It's www. planetaryhealthcheck. org. and you can read all about the boundaries. This is what we call our first phase. It's a website. It informs very similar to the report that we generated.

[00:19:23] What we really want to move to is getting more into the planetary monitor and the simulator where people can really interact with the data. But if you want information on the report and the status of the planet, you can find it there.

[00:19:36] Nate Hagens: What do you care about most in the world, Keri?

[00:19:42] **Kari Stoever**: that's a, you know, what gets me up in the morning and keeps me going is this profound sense that love calls me forward.

[00:19:52] Love for creatures, love for people, love for this planet and, and we need a lot more of that. And I don't mean it in the fluffy, romantic way. I mean the kind of sacrificial love, which means I'm willing to give things up, that I know will. push that positive energy back out in the world and connect.

[00:20:15] **Nate Hagens:** If you had a magic wand and there was no recourse to your job security hat wearing, Carrie what is one thing you would do to improve human and planetary futures?

[00:20:26] Kari Stoever: You know, I'm tempted to put my policy hat on, but I'm not, because I'm going to keep it much more at the esoteric level, which is, oh my gosh, I would, my magic wand would be people would awaken. and consciousness, and know how deeply they are loved, and how deeply connected we are. Because I think we wouldn't be doing so much harm to each other, and the world, if we really fully appreciated that truth, which I believe is a, like, the fundamental truth.

[00:20:59] **Nate Hagens:** Can people have such an awakening by looking at charts and graphs?

[00:21:04] **Kari Stoever**: No, but, you know, we also have things like augmented reality, and I mean, who knows what we can be able to do to bring people into the ecosystems that they may never see to help them fall in love with it. I mean, I do have this theory that we protect what we love, right?

[00:21:21] If your house is on fire, We naturally run out. If your house is on fire and your child's inside, you run through the flames. So can we get people to run through those flames? The

[00:21:32] **Nate Hagens:** problem is the match has already been lit and the fuse is like a 50 year fuse and it's near, but we don't feel the, emotional heat.

[00:21:42] yet. Some do, of course, but this is almost the perfect storm for our evolved brain to ignore, deny, or dissemble, which is why your work is so important because you're, shallowing our discount rates by creating these visualizations in a way that makes us feel and understand it at an emotional level now before it's obvious to everyone's eyes.

[00:22:07] Kari Stoever: Yeah, well, you, can't stay in the numbers, right? You've got to. Get back in nature. You got to connect with living systems, people and other species, all kinds of species. So, you know, just, People need to get and reconnect with the planet, reconnect with species, reconnect with each other. And then I feel like we'll be willing to make those sacrifices and changes that are so desperately needed before we do get to a more dystopian future.

[00:22:38] **Nate Hagens:** We're friends. We've talked a lot this year. So I have no idea how you're going to ask this, answer this question, but if you were to come back and have a conversation on the podcast in the future, what is one topic that you're deeply passionate about that you would be willing to take a deep dive on that's relevant to human futures and The Great Simplification?

[00:23:01] **Kari Stoever**: I am a systems geek in complexity theory and systems because that is really, you know, What needs to change and what we need to understand more. So what are the systems of the future? What are the governance

mechanisms of the future? Another thing, I think if I had a magic wand, if we could just get rid of that tribalism in our brain, I don't think we've evolutionary caught up to where we need to be from a systems perspective.

[00:23:28] So understanding how deeply connected we are that would be another magic wand thing, but it is more on the systems and what, you What needs to be in place for the future that we want versus the future we're going to get on this current path, which doesn't look good for us.

[00:23:45] Nate Hagens: Kerry Stover, thanks so much for your time today.

[00:23:47] And thanks for your very important work on planetary guardians, planetary health check, and all the related fields you're working on.

[00:23:53] Kari Stoever: Good to see you, Nate.

[00:23:54] **Nate Hagens:** If you enjoyed or learned from this episode of The Great Simplification, please follow us on your favorite podcast platform. You can also visit the great simplification.

[00:24:05] com for references and show notes from today's conversation and to connect with fellow listeners of this podcast, check out our discord. This show is hosted by me, Nate Hagens, edited by No Troublemakers Media, and produced by Misty Stinnett, Leslie Batlutz, Brady Heine, and Lizzie Sirianni.