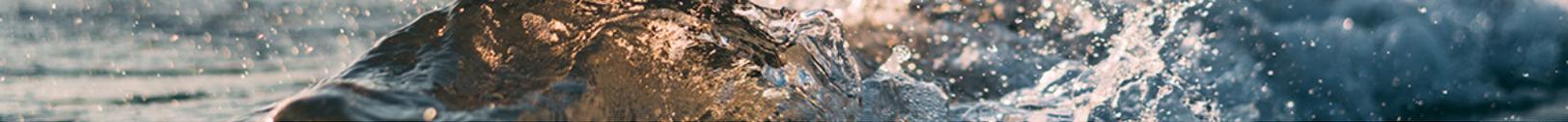


THE DAVID SUZUKI PODCAST



COVID-19 & THE BASIC ELEMENTS OF LIFE





THEME MUSIC

INTRO [1:16]

David: Our bodies are more than 70 per cent water.

The coronavirus also exists in water, carried in tiny droplets before it makes its way into our lungs. Without water, there would be no pandemic, but of course there would also be no us. Water makes life possible.

Thanks to the hydrological cycle, water is constantly replenished in the air and flows in great rivers across the planet. But whatever we do to water, we do to ourselves. As the oceans rise, as stores of clean water are threatened and as the virus rages on, how should we change our relationship with water?

Traditional water keepers around the world show us our responsibility to protect, honour and share it. How can we learn from them water's role in all life on Earth, and our responsibility to use, protect and share it?

In this episode, I speak with author, educator, artist and activist Jeannette Armstrong of the Penticton Indian Band about the importance of language in framing our worldviews. I also speak with young activists Autumn Peltier and Allie Rougeot about why they got involved at such a young age, and what's at stake for youth activists everywhere.

Plus, long-time David Suzuki Foundation oceans expert Jay Ritchlin joins me to talk about the current risks facing these massive bodies of water.

But first, why the heck should you care about water?

TRANSITION MUSIC

MONOLOGUE [4:26]

David: Satellites probing asteroids, the moon, or other planets always search for water as the first ingredient of life (as we know it).

H₂O is a remarkable molecule. To understand its special properties, imagine the familiar profile of Mickey Mouse, a large circle for the face — that's oxygen — with two smaller ones on top for the ears — that's hydrogen. That asymmetry creates different poles, like a magnet. Since plus and minus attract, water molecules are attracted to each other and to any substances that have charges. That's why water dissolves many substances.

In liquid form, water molecules form brief clusters hundreds of times every second to make a shimmering, constantly shifting blanket that can hold large amounts of energy.

At 0°C, water forms crystals we call ice, but unlike most crystals, ice floats. Its white surface



reflects incident light including infrared, which is called an albedo effect. Even when ice melts, most of the water molecules remain held together in small clumps.

Water is the birthplace of life. Over hundreds of millions of years, water dissolved atoms from rock, accumulating a molecular soup that eventually aggregated into a living cell, absorbing and eliminating elements through a membrane.

That's the great jump, sparking life into lifeless chemicals.

As the primary component of the cytoplasm, water inflates cells, enabling metabolic reactions and transporting within and outside of cells. Sixty to 70 per cent of our body weight is water — less if you are overweight and more if you are skinny. Our lungs are 83 per cent water, the brain and heart are 73 per cent, and even bones are 31 per cent.

We can see the dependence of the body on water when we don't have water. We normally lose an average of 2 to 3 litres a day through sweat, breath, urine and feces. Because it is so essential to the body, the brain is sensitive to every drop. A 2 per cent decrease below normal causes the brain to signal the body — thirst! I'm thirsty! If not topped up with more water, our mood changes as we become irritable, develop a mild headache and become fuzzy-headed. When blood volume drops, the heart has a harder time pumping oxygen and nutrition to the body because the blood is thicker. Kidneys retain water then, urine turns dark. We feel hungry even if we don't need nutrition, because food contains water. Joints need water for lubrication, so they begin to ache. Blood flow to the skin is reduced so skin turns grey, while the core temperature rises. Having no water causes a painful, nasty death.

The great gift to all life is the hydrologic cycle, where water evaporates, condenses in clouds and falls as rain. Life is part of that cycle. Plants, fungi and bacteria filter water, which is sucked up from the ground by trees. They transpire it into the air as vapour that rises and flows in great rivers sprinkling onto land and oceans. A molecule of water from the Atlantic flowing across the Amazon rainforest may rise and fall five or six times before reaching the Andes mountains.

The number of water molecules in the hydrosphere — all the water in the air, on the surface and underground — is calculated to be 57×10^{46} (that's 57 followed by 46 zeroes!). Nature is the ultimate recycler.

Huge volumes of water are held back from the hydrologic cycle in ice sheets over Greenland and Antarctica. If all the ice in Antarctica — which averages 2,133 metres thick — were to melt, sea levels would rise by 61 metres! The Greenland ice sheet would add 7 metres by melting — and it is melting.

Of all the water on Earth, 96.5 per cent is in the oceans and only 2.5 per cent is freshwater. Of the freshwater 68.7 per cent is in ice caps and glaciers, 30 per cent in groundwater and a mere 0.3 per cent is in surface water of lakes, rivers and swamps. Of the minuscule amount of surface water, ground ice and permafrost account for 69 per cent, lakes and rivers 25.8 per cent, the atmosphere holds 3 per cent, while a mere 0.26 per cent is contained inside all living organisms.



Fresh water should be considered a priceless “rare Earth substance” for us. The massive impact of human activity is indicated by the state of the water in the oceans. Once teeming with life, dozens of “dead zones” deprived of oxygen by eutrophication stimulated by agricultural runoff are found in all the world’s oceans and are increasing in number, in size and duration. Ocean plastic now weighs as much as all the fishes, while pH is dropping due to acidification from rising carbon dioxide levels (carbon dioxide dissolves in water as carbonic acid). The great movement of cold through the thermohaline cycles beginning in Antarctica is being disrupted by climate change — with potential to obliterate regular seasonal cycles, while the movement of water through monsoon winds is changing radically.

We are water. Whatever we do to water, we do to ourselves.

TRANSITION MUSIC

VOICEOVER: ALLIE AND AUTUMN INTRODUCTION [1:50]

David: Can you remember how you felt about water as a child?

Rain that poured down, forcing you to stay inside. The puddles that formed when the rain stopped. The satisfying splash they made when you jumped in.

Can you remember the first time you saw a lake? An ocean? Water seemed like it stretched on forever, its dark depths full of mystery. Young people have the power to remind us just how sublime — and essential — water is on this planet.

Today, I’m speaking to two young activists who can us all a thing or two about what it means to punch above your weight. It can be hard for young activists to get a seat at the table — often, younger people find that they have to take matters into their own hands before they get the recognition they deserve. My guests today, Allie Rougeot and Autumn Peltier, have found those places to speak out.

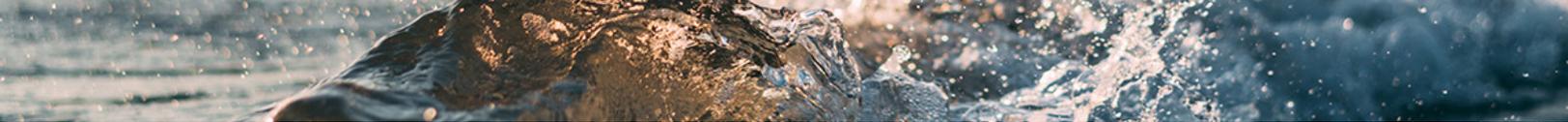
We’ll hear from Allie in a moment. But first:

When she was just 12 years old, Autumn Peltier publicly confronted Prime Minister Justin Trudeau about the lack of safe water in Indigenous communities. At 13, she addressed the UN General Assembly in New York City.

“We can’t eat money or drink oil,” she told them.

She is a member of the Wiikwemkoong First Nation in northern Ontario and was named chief water commissioner for the Anishinabek Nation. What Autumn witnessed growing up gave her an early introduction to the idea of environmental racism.

In a country with seemingly plentiful resources, she saw how Indigenous communities were being pushed onto “leftover” land and left with no sources of usable water. It drove her forward, and she went on to fight for her cause around the world. Now, at 15, she’s earned her reputation for being the kind of person who can go nose to nose with world leaders and demand action.



ALLIE AND AUTUMN INTERVIEW [Duration: 16:32]

David: First, I just wanted to ask Autumn, what was it that motivated you at such a young age to be concerned about water?

Autumn: Well, what really motivated me, because I was eight years old when I first realized I wanted to do something about the drinking water in Canada for First Nations communities. And so basically what my motivation was, was seeing that there were other kids that were my age and younger, not knowing what it was like, and, like, never experiencing what it's like to drink clean water from their taps. They weren't able to do daily things like, as simple as brushing their teeth or washing their hands or even taking a shower. And so that kind of just affected me, and I was like, well, I need to do something about it because I didn't like the way that there were kids my age and younger that had to live like that.

David: When I was a kid — this is long before your parents were even born — when I was a kid, I drank from rivers and creeks and lakes. And nobody questioned it, that's the way it was. You know, Canada's one of the most gifted countries in terms of water. And yet now across the country, Indigenous communities especially don't have access to clean water, and yet they're very remote. What's happened with so many Indigenous communities that can't drink out of a tap?

Autumn: Well, like, even my grandparents and my parents were able to drink water from the lakes and rivers when they were children, and my mom tells me about that. And I think that it's coming from a lot of the factories, the pipelines. And when the government says, oh well, it's not going to break. But then it ends up breaking, and it contaminates the water in a First Nations community. And I think that's kind of where environmental racism comes in, because First Nations people in Canada were given specific spaces in Canada that were kind of like, I guess you could say, useless to non-Indigenous people. And there's a word in my language. The word is ashkinigonee. And in my language, that means useless, leftover land. And so that's kind of how we look at it is, because we were given leftover land that was useless to them. And then the Canadian government goes and puts pipelines through our territories and that destroys our leftover land. So I think that's where a lot of environmental racism comes in.

David: Yeah, that's interesting because built into our society, right from the beginning of what we call Canada now, was a racism that the Indigenous people, you know what, were given... How could they be given land that they'd lived on for thousands and thousands of years and cared for? You know, it's built so much into the way Canada has evolved. We're not even aware of it. You're not going to find a few bad apples and have a few courses and get rid of the racism because it's built into our society itself. You actually got to the United Nations. How did that come about?

Autumn: Well, my first time speaking at the United Nations, I was 13 years old and this was World Water Day in, I think, 2017 [actually 2018]. There was actually kind of a funny story behind how I got there, because I was kind of actually just getting started into my work. And so, like, my mom, she's my manager, and so we've kind of, like, we're still developing and adapting to this new thing of being well known. She was cleaning out her email, and it was in her spam email. It was from the United Nations. She was actually going to delete the email thinking it was, like, a fake or a scam. And it ended up being from the president of the General Assembly.



David: My goodness.

Autumn: So, yes, I think me getting there is, like, kind of like the main reason I am where I am today, because I was heard by all the world leaders that were in the General Assembly. And I think with that, that's kind of why I am here.

David: What did you tell them?

Autumn: Well, I spoke a lot about, like, my Indigenous and cultural perspective, a connection to the land and water, because I think when the message about the land and water is coming from an Indigenous person, it's a lot different because we've had to experience first-hand these different issues that are going on in Canada because a lot of First Nations communities in Canada are living in Third World conditions in a First World country. And so I think if someone like me who's seen and experienced these things first-hand, I think that's when I need to speak up, and that's when the message becomes important.

David: University of Toronto student Allie Rougeot was 10 years old when she started advocating for climate action, back in her native country, France. Now she leads the Fridays for Future climate movement in Toronto. She helped lead the massive Toronto strike for climate justice last fall, a strike that had over 50,000 participants. And she's not about to let COVID get in the way of organizing for climate justice.

In the 1990s, there was a young man named Jeff Gibbs who started a group called Environmental Youth Alliance, and that just spread like wildfire right across the country, and he had thousands of kids really enthusiastic. But kids grow up, they go to university. They, you know, they start dating, they're living on their own. And all kinds of things are distracting. So a lot of that youthful energy gets kind of funnelled off into other areas. And as you get a little older, you start worrying about, well, what am I going to do with the rest of my life and jobs...

The power of youth, it seems to me, is that you don't have an investment yet in the status quo. You can see the world with the innocence of, as we hear from Autumn, an eight-year-old child, you know, the story of the child who tells the emperor he has no clothes. You know, that's what innocence allows you to do is see with clarity. What do we do with that youthful energy that can see the truth and translate that into real political action? What do you think, Allie? I mean, is it just to continue on with the kind of things that you're planning now?

Allie: No, please, no. I always joke that after 2020 or 2021, the strikes will just become full-on revolutions because we can't be striking for 20 more years. So I don't think that's going to be the way we operate.

But I do think one good aspect of what the youth is doing right now is forming alliances by being more intersectional. So, past environmental movements honestly had real problems. A lot of them were not coherent with Indigenous rights. A lot of them did not address racial inequalities. A lot of them didn't even talk about labour rights. And so right now, as a movement, we're really trying to see that it's so connected that we should be building those relationships and kind of, you



know, get over ourselves and not just say, oh, it's just the youth taking power, but it's really about forming a really good community of people that want the change.

So I'm hoping that that will give us more weight, because if it's not just me that's voting, but it's also the whole people in the labour movement that we talk to, and then the Indigenous communities, and then the racialized folks that understand that we're also going to be fighting for them when they need us, then I feel like we might actually have weight that we definitely didn't have before when we were only youth, I guess.

David: And I've found what's really powerful now is that there are now all kinds of groups supporting Indigenous people, and it's far more than just a human rights, social justice thing. They're realizing the only people on the planet with a track record of true sustainable living for thousands of years — no government or a corporation can say, "We've got a sustainable policy for thousands of years" — except Indigenous people. And that, you know, seeing groups now supporting their cause — these are all really deeply interconnected. Is that how you see it, Autumn, that, you know, you can't deal with these issues unless we deal with racism and all of these inequities that are built into our country?

Autumn: Yeah, I think it's, a lot comes along with activism and a lot of it from, coming from an Indigenous person, is racism, because even when I'm doing my activism, I get a lot of racial comments. And it's not only about my race, it's about my age. And I think it's a lot harder to do it as a youth, especially an Indigenous youth. And that's only because I've been told, well, what are you going to do, because you're only 15, or at times you're only 12, you're only 13. And I think, I personally think the message is stronger when it comes from a youth. And the message means a lot more when it's coming from a younger person, because that's how you know that older people or politicians are doing something wrong is because a child shouldn't have to be speaking up for their future, or speaking up about these issues. And so personally, for me, I've been given actually kind of a bigger role because I was especially noticed by my Indigenous leaders. I was noticed by the Anishinabek Nation, and they gave me the role as chief water commissioner. So I actually have a seat at the table when making decisions for the Great Lakes or Indigenous communities.

David: It isn't always easy to be a youth ambassador, especially if your peers don't exactly understand what you're fighting for. But Allie says that lately, more and more young people are getting involved.

Allie: When I started — and I was really young when I started caring — I was definitely told I was crazy. I was 10 years old approximately, and I was talking about biodiversity loss in school. And I think people thought I was genuinely crazy for talking about corals regularly. So at first it was really "the crazy kid". And then something shifted around maybe two years ago, where all of a sudden I was really cool because I was able to talk about these things, and I don't know, I think it's obviously the Greta [Thunberg] phenomenon, the fact that it's impossible to ignore. But my peers really went from "That's her thing" to "How do I get involved?" And even though a lot of them are not, I would say, activists or are not ready to put a lot of their time in it, they are definitely talking about it with their parents or they're ready to defend it or they're ready to show up maybe once in a while. And I think that's already a big shift from what I saw 10 years ago.



Autumn: With my experience, a lot of, like, my impact with my friends and peers is girls. And they are aware of the situation, they're aware of the issues that are going on. They're able to tell other people that they're friends with or they have connections with, they're able to tell them about this issue. So it's kind of like a chain reaction, I'd say. It's kind of like the word just keeps going on, and even on, like, a level where it's not my friends and peers or it's youth that I'm speaking in front of, I know I'm making an impact because not only me, but there's so many other youth activists that are making impacts and our voices are being heard and we're empowering so many other youth.

David: As an old man, one of the most exciting things I've seen in the last few decades has been the guardian program. It's a program that's been very successful in Australia with Australian Aboriginal people, where youth now are paid to go out with elders to learn the traditional ways and culture, and basically be guardians of the land. And there have been groups of this — like the Haida in Haida Gwaii have a guardian program — and they're saying, all across Canada now, youth should have the opportunity to care for their land and learn from their elders.

Well, I think we've certainly learned a lot from the two of you. I'm sorry to be an old man chiming in and giving my two cents' worth as well. Let's find a way for us old folks to work together with you young kids, and we'll get some real power.

Allie: Thank you very much, both of you. Autumn, it's always really inspiring to see your work, and David, of course, thank you for decades of fighting for this planet.

VOICEOVER: POST-INTERVIEW REFLECTION

David: It's so easy to feel pessimistic about our future. But having leaders like Autumn Peltier and Allie Rougeot driving our movement forward gives me hope that we can all live in a better world.

TRANSITION MUSIC

VOICEOVER: JEANNETTE INTRO

David: The water cycle reminds us that everything is connected.

Morning dew evaporates when the sun shines down. It joins up with other dew droplets. They form clouds and blow over to the next town. Eventually, my morning dew becomes my neighbour's rainstorm.

Our ecosystems are in constant conversations with each other. As humans, it's our job to listen.

This is where our next guest, Jeannette Armstrong, comes in.

Jeannette is a poet, a writer, a scholar and above all, a knowledge keeper, helping preserve the language and culture of her Syilx [Zielke] heritage. Her work researching and preserving Indigenous language and oral history has earned her international acclaim. For Jeannette and her people, thinking about sustainability means thinking about the land as a whole; an organism cannot survive outside of its ecosystem.



As Jeannette explains, *tmix* [t-mee-whk] is a word that appears in all 25 Syilx languages going back 12,000 years, and it's an essential part of building sustainable communities. Understanding *tmix* can help us join in the conversation with the nature around us.

JEANNETTE INTERVIEW [Duration: 11:21]

David: Thanks so much for doing this, Jeanette. You know, the whole thrust now is sustainability. But from your perspective, what is absolutely required to really think about sustainability in a community?

Jeannette: If I can use a modern context of the idea of systems thinking, or of *gestalt* in German, right, when a number of things come together, a different picture emerges. So in a system, each thing by itself appears to be what it is itself. But when you look at a whole system, another profound, deeper picture emerges of knowledge. If you understand the cycles that exist, then that's what *tmix* is, so everything that is a life form. When we say *tmix* we're not actually saying a coyote or a deer, we're actually saying the life cycle of that deer. Wherever it started from and the ongoing ability to regenerate is what a deer is. It can't be a deer unless it can regenerate and reproduce, which requires everything around it to do that. So *tmix* refers to all the life forms that do that together based on the cycles that we have here — spring, summer, fall, winter, day and night, those regenerative cycles.

So the idea of *tmix* isn't about an animal or a spirit. It's a knowledge about how those cycles are incredibly important to our responsibility. It's almost instinctual. I think it's something like what the epigeneticists talk about in terms of the DNA memory, right? That you feel the wrongness and you feel the pain, you know, when there's clear-cuts or when there's real damage to an area. You're willing to stand out there in the cold and then the freezing. You know about that feeling, David —

David: Yes.

Jeannette: — not just Indigenous people have it, many people feel it and have it, but they don't know how to articulate it. We do. We know what that responsibility is.

David: I remember I talked to James Gosnell, who was one of the great leaders of the Nisga'a people. He told me about the first time he encountered a clear-cut. He said he was just walking through the woods and he suddenly came to this opening, and his exact words were, "I couldn't breathe. It was as if the earth had been skinned. And I just didn't understand how anyone could do that."

Jeannette: Yeah, I think that a lot of human beings feel that, but they don't know what that feeling is and they don't understand how to fill that gap that seems to be continuously there in their being, in terms of happiness, I guess is the best word, other than going out into nature, and then that gap seems to lessen. But knowing what those patterns and what those cycles are and what needs to be done for them to fully regenerate and to act accordingly — it's that part that's missing. How do we act accordingly? How do we be responsible through our leadership and through the things that we do individually? How do we do that?



You know, as a human being, we have the tools. We have everything that was given to us in terms of creativity and intelligence and, you know, and the skills that we've built up are tremendous, tremendous. Science has done a wonderful job doing that. And so it's time we need to put that thinking together for us to be more responsible to the life forms and to the future.

David: I wonder, in the time we have available, can we just get an idea of how, from your culture, you would regard these really fundamental things that are not even considered resources in our society? You know, the air, the water, the soil. Could you give us an idea of each of these?

Jeannette: I'll just start with fire. One of the things that our people use, is central to their ceremonies, is the idea of fire. The reason for that is that we know that without fire, even our bodies wouldn't be alive, right. The fire itself is the connecting force with water in terms of how everything lives. And we acknowledge that every time we do a ceremony, we must have fire there and we must speak to that fire because we are that fire as well.

And so we know that inside, but we also know that the idea of light and the idea of warmth and the idea of the physical part that fire does, we also need to understand what it is and what it requires of us in terms of, you know, the way the land requires fire and the way that it works in the natural process of taking care of the health of the land. So we do know that, and we do use fire in that sense. But we're very clear about the sacred idea of knowledge of what fire really is.

And so that's one thing on fire. In terms of water, as I was mentioning, the connection between fire and water is what we understand that makes a life form alive. And so in every major ceremony, water also has to be present. So those are two things that the Syilx people continuously bring to their sacred ceremonies to acknowledge that that water and that fire is what we are. So every tmix̓, it travels through them continuously and travels through the air, travels through the land, travels through our bodies. And so that if you could see that flow of water that continuously ties everything together as a life form in those cycles of rain and snow and wetlands and springs, those are all a part of what brings life to us. So it's our life.

When we go to the water, we have ceremonies for the water, to rejoin with, to put ourselves back at that basic level of understanding. We are part of this water, and this water is part of everything that gives us life. And so that's really an important aspect to think about in terms of those cycles that I was describing earlier.

The idea of air in our language, we have the word slk. What it actually means is describing this movement outward and a pulling inward. The land has that movement, the land is that movement. Those relationships, those connections that are not seen, the connection between us and the breath of life, the connection between us and water, the connection between us and the idea of fire, the knowledge of fire and the idea of knowledge of water, that those connections are unseen. You cannot see them, you have to know them, you have to understand them, you have to, in the human mind, in our human capacity that we were given different from the rest of the life forms, is a way of survival, is a way that we have been given to adapt to the places we're in. That's our tool of adaption. And so we as a human being, in our seeing of those unseen things, which is knowledge that we conform and we live responsibly within the laws of that place,



within the laws of the tmix of that place. So for us, that's what spirituality is. It's not a worship of animals or birds. It is a clear understanding of the laws of that place and our responsibility to uphold that. Our responsibility to stand for that. Our responsibility to protect that. And our responsibility to teach that.

So that's kind of what spirituality means to us. And so in our ceremonies is a constant reminder to show the people, this is why we eat. You know, we have to take a life to do that, as a part of that interdependent cycle. We have to be able to live responsibly so that when we take a life, we know that it's going to be regenerating. We know that it's going to be continuing. And we acknowledge that. And so that's what in my mind, when we're talking about spirit, that's a very different view than the idea of unseen deities and things like that, although it can be expressed in that way. And I think the human mind needs to be able to express it and see, you know, the unseen beauty that sticks everything together and makes it work, right?

David: What amazes me is, after all that's been done to the Indigenous people to stamp that out, I still find all across this province Indigenous people are saying, we're in the same canoe, we have to work together. You're still willing to share that. And we need that, to understand what the words that you use really symbolize. We need to find the feelings that come at us from those words. And I'm amazed at the generosity of being willing to share that. But I guess we have to work together if we're truly going to be sustainable communities.

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VOICEOVER: POST-INTERVIEW REFLECTION

David: Like Autumn, Jeannette feels deep ancestral ties to the land and the elements. She says that water exemplifies the connectedness of all natural life. We all have a role to play in building sustainability.

Young activists like Allie and Autumn don't have to fight for a seat at this table.

Jeannette has a vision of this new order. She's helping to manifest it through the En'owkin Centre, which helps implement Indigenous knowledge systems in the Okanagan region of BC. According to Jeannette, these kinds of methods help change the deeper relationship that people hold with the land and with each other. And it's the beginning of the kind of big change that we need to move forward.

We are water. Like water, one molecule — one person — doesn't make a wave. It's when we come together as a cohesive unit that we can bring about a new wave of change.

TRANSITION MUSIC

JAY INTERVIEW [Duration: 07:27]

David: My guest today is Jay Ritchlin. Jay is one of the top oceans and nature protection experts



at the David Suzuki Foundation, from sustainable fisheries and aquaculture to protecting the Salish Sea orcas, wild salmon and more, he works to preserve and restore Canada's oceans on a number of levels. His campaigns for change involve understanding different philosophies on our natural world, often including partnerships with Indigenous nations. I'm glad to speak to him today about the importance of water.

David: So Jay, you've been with the David Suzuki Foundation now for what, over 15, 20 years? You know, so much has changed in that time, yet we're still fighting so many of the same problems! So, what is the current state of our oceans? What challenges do they face?

Jay: Well, you're right, David, I mean, you know, the "Plus ça change, plus c'est la même chose" — that's the only Rush [lyrics] that I know. But, you know, the more things change, the more they stay the same. We fish a bit better, but we still have salmon populations in real trouble, you know. We have double-hulled tankers, but we still ship ever increasing amounts of toxic oil, and often we spill it. And, you know, we have recycling programs that are ever expanding, but plastic is still filling our oceans and waterways.

So, you know, Canada has 7.1 million square kilometres — almost 70 per cent of the territory Canada manages — is ocean, and we've got 17 per cent of the world's coastline. It comes with what I think of as huge responsibility to deal with this. You know, the biggest impacts are still fisheries, the way we get food out of the ocean. Climate change is clearly acidification, warming temperatures, changing species distributions, pollution. You know, the oceans are downstream from everything, and then habitat damage and invasive species continue, whether it's digging up minerals from the ocean floor or bottom trawling or building human structures. Even the ocean noise that we create with our shipping is ocean habitat destruction.

David: Who would have thought the oceans that cover 70 per cent of the planet, that we would have such a huge impact on it? You know, it's amazing. The basic element of life we've explored in this episode is water. As an oceans campaigner and environmentalist, when I say water, what does that mean to you?

Jay: Well, you know, I just think "Water is life" immediately, right? People say it. It's often repeated, but it bears repeating. You know, I've heard it said that we humans are large, leaking sacs of water and that water does, it connects us to everything, to other people, to the streams and rivers and oceans around us and to the other creatures on the planet that also all need water to survive. So I see it as the glue that holds us together, the telecommunications that takes signals back and forth.

And, you know, I think about the hydrological cycle that we all learn in elementary school. It is one of the best illustrations of that interconnectedness. I feel like it should be the founding philosophy for how we run our societies. But often we say things like, "Water is priceless," which unfortunately often ends up meaning it has no value in the way we treat it. So there's a lot for us to still learn about just that simple relationship to water.

David: So what are some of the bigger things that we have to do to take better care?



Jay: Well, you know, there are different elements of water and oceans pollution that are really important in different places. But for all of us everywhere, we've got to a) first learn to love it, respect it and live within the bounds of what it can sustain. You know, to be precautionary and respectful and not assume that it's too big to hurt.

We tend to think about "How much can we take before the system collapses?" and we're trying to encourage that shift to "How little do we need to take so everything else can thrive and we can still have a good quality of life?"

David: So you've had the great privilege of working with many Indigenous nations through your work with the Foundation. Has that taught you anything? What have you learned from that?

Jay: Well, I mean, yes, I'm so grateful and so fortunate. I mean, I always want to start with saying that I don't want to suggest that all Indigenous nations are the same. But the worldview that starts with us being connected to and intimately from the earth around us and the oceans around us is critical. It's from that space of respect. I'll never forget starting the Blue Dot Tour. We went to talk to various Indigenous nations, and they said, "Well, the environmental rights thing is great. But what about the responsibilities? You know, we take every right with a responsibility." And to me, that maybe has resonated as much as anything from the Indigenous people I've worked with.

David: So Jay as a non-Indigenous person, a white man, what have you learned about what it takes to be an ally of an Indigenous group?

Jay: That is an ever-evolving and really challenging question. I had an experience when I was just getting out of university — I did a cultural exchange on the Lakota Sioux reservation in the United States, and I lived there for a month. And there I saw something that really resonated with me about family.

I'm an adopted kid, and my mom taught me that the family is who you make your family. And I've seen that so many times in Indigenous nations as well, where they will welcome you in, if you're willing to listen and to accept that there are things that you don't know and don't understand, that you should just be patient and kind of try to learn. I've been really very eager to support rights and title and those legal issues and resolving the fact that we took most of this land illegally and we've got to figure out how to give it back.

I've certainly been challenged by my upbringing as a Western scientist, someone who doesn't want to believe in gods and the like, but who understands the deep spiritual connection that comes from an Indigenous worldview of living with the land and coming from the land.

So I guess I try to stay open. I try to be a good neighbour. I try to get to know people, just get to know people on a simple level in their context, and then ask them what they need.

David: You're also heavily involved with the Foundation's work to advance a green and just recovery from COVID-19. What does a green and just recovery look like to you?

Jay: Our relationship to nature has got to be part of the recovery, and recognizing that the



way we run our economy is basically designed to degrade nature, we gotta shift that. A green recovery means learning to set up our societies and our economies within nature, so that we are benefiting it back as it benefits us. And the just part means to me that we share that benefit of our society equitably. I think when we don't have equitable sharing of resources and wealth, that leads to more environmental degradation, as well as the extreme cost in human life, human health, human happiness, and the more we create a society that will share those benefits and take into consideration the health of all the people in our society, I think the easier it'll be to keep the environment healthy as well.

VOICEOVER: POST-INTERVIEW REFLECTION

TRANSITION MUSIC

OUTRO

Thanks to Jay Ritchlin for that expert interview. Jay has been with our foundation for a long time, and it was great fun to catch up with him and remember all he's done for us over the years.

And thank you for listening to Season 1 of The David Suzuki Podcast: COVID-19 & the Basic Elements of Life, produced by the David Suzuki Foundation in partnership with Jason Arkley Productions.

I recorded these interviews from the traditional, unceded territory of the We Wai Kai First Nation. I am so grateful for how Indigenous Peoples have been responsible stewards of these beautiful lands for thousands of years, and how they continue to teach us so much about how to live sustainably on this planet.

For more information on how you can help advance a green and just recovery from COVID-19, visit davidsuzuki.org/greenandjustrecovery.

To support our work and help us make more podcasts like this one, visit davidsuzuki.org/donate.

This wouldn't have been possible without our incredible production team: Jason Arkley, David Leibl and Brendan Glauser.

And Katie Jensen, Renita Bangert and Michal Stein of Vocal Fry Studios.

Theme music by Scott Nolan. Artwork generously provided by Roy Henry Vickers.

Until next time, take care of yourself, each other and this beautiful living planet. It is, after all, our only home.

Music is an incredibly powerful source of expression and communication. It can bring people together and inspire action. It's played a vital role in social movements as long as I've been around. At the end of each episode of this podcast, we'll play a song to end on a healing, meditative note. Four of the five artists we profile are independent, from the heart of Turtle Island. We



hope you enjoy, and do what you can to support up-and-coming musicians, especially during this particularly challenging time.

To close this episode, a song by Leaf Rapids. From Winnipeg, Manitoba, Leaf Rapids' latest album features songs inspired by the stories of their settler ancestors. The title track, "Citizen Alien", explores the experiences of singer and guitarist Keri Latimer's relatives during the internment of Japanese Canadians during World War II. At one point, the family had just 24 hours to pack one bag of possessions each, potentially never to return home. The parents kept a brave face for their children, saying they were simply "going on vacation". Here is Leaf Rapids with "Citizen Alien".

MUSIC PERFORMANCE