# Trinidad and Tobago - KHAWv2

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#### SPEAKERS

Lisa Craig, Doug Parsons, Kishan Kumarsingh, Margaret MacDowell, Dr. Angela Schedel, Martin Perschler, Dr. David Guggenheim, Dr. Clary Larkin, Dr. Jay Haviser, Jeff Goodell, Kara Roopsingh, Mr. Carlos, Ambassador Candace Bond, Vernaire Bass, Cheri-Ann Pascall, Joel Martinez

### Doug Parsons 00:00

Hi everyone this is America adapts the climate change podcast Hey, adaptors get ready for an exciting episode. As we head to Trinidad and Tobago for the keeping history above water conference. This beautiful island nation is famous for creating the limbo dance and steel drums. The event brought together international speakers and experts to discuss the challenges faced by Island communities in the face of climate change. The ultimate goal of the conference was to advance the resilience and long term preservation of Trinidad and Tobago has historic sites and cultural resources which are increasingly impacted by climate change. We were joined by citizens from Trinidad and Tobago, Montserrat, St. Maarten, Cuba, as well as cultural heritage experts from the United States islands are particularly vulnerable to climate change, and we'll be learning about the innovative steps these communities are taking to keep history above water. During my visit, I went on some fascinating field trips and had the opportunity to learn about the people and culture of Trinidad and Tobago stick around until the end of this episode for an interview with one of my tour guides Mr. Charles from the Paramon region of the island. Mr. Charles was an incredible storyteller, and I'll also include one of his stories at the end of the podcast. Plus I had the pleasure of interviewing the US Ambassador to Trinidad and Tobago, the first US ambassador on America daps. To get this episode started let's chat with Lisa Craig of the Craig group to set the stage for our journey to Trinidad and Tobago and the conference. Throughout this episode, you'll hear some of the sounds from my time on the island, including the amazing steel drum performances that originated in Trinidad and Tobago. So let's dive in and learn how these Island communities are adapting to climate change. Hey, adapters, we're kicking off this exciting episode with Lisa Craig of the Craig Group. Hi, Lisa, welcome back to the podcast.



# Lisa Craig 01:50

Hey, Doug, nice to talk with you again.

# Doug Parsons 01:52

For those who aren't familiar with the episode that you did with me, remind us again, what you do with the Craig group,

# Lisa Craig 01:57

I had spent some time working with the city of Annapolis developing a resilient strategy based in the protection of cultural heritage basically historic sites using FEMA based approach to develop hazard mitigation planning and looking at adaptation strategies. During that time, we actually hosted a keeping history above water conference. And so as a consultant, what I've now found extremely useful for historic communities is to begin planning for climate resilience or climate adaptation, as we see the changing climate impacting communities, historic coastal communities, in particular, with sea level rise with extreme storm events with increasingly significant disasters. I specialize and my team specializes in working in those communities to identify vulnerabilities to develop response plans, mitigation plans, resilience plans, adaptation plans, whatever you want to call it, and then basically to assess the community's values for historic preservation for history for culture. And really, what are they want to see in terms of adaptation strategies? Are they structural? Are they nature based what works in their community for their particular environment and for their historic assets?

### Doug Parsons 03:20

We've been talking about this for a long time, we're going to trade in Tobago, I'm so excited about this. But first, let's ground some people in what we're trying to do here. What is keeping history above water?

### Lisa Craig 03:30

Well, keeping history above water is now entering. In essence, what we are looking at is the 10th iteration of this conference, this initiative, sometimes it's a conference sometimes it's a workshop. Sometimes it's just a presentation. But keeping history above water was developed by the Newport restoration foundation back in 2016. And hosted first in Newport, Rhode Island. And the concept there was to bring together heritage specialists and scientists and government officials, residents, those who were directly impacted or had expertise as it related to climate change and climate adaptation specifically for historic communities. Since that time, one of the most recent ones I was involved in was one in Nantucket in June of 2019. And again, you'll remember you did the same podcast interviews in St. Augustine when the the conference was hosted there. So what we're doing is we're taking that framework of bringing together all of those experts talking about heritage talking about culture and taking it to Trinidad and Tobago, so we can help that community, specifically the National Trust Trinidad and Tobago as they are moving forward with their resilience and adaptation planning for their cultural heritage sites.



### Doug Parsons 04:51

So you've done a lot of work in the south and along the eastern seaboard on adapting these



nistoric communities to climate change. But you just mentioned Trinidad and Tobago. So why are we going

# Lisa Craig 05:00

Trinidad Tobago, why did that become the site for keeping history above water? You know, it's interesting. It shouldn't really be a global initiative. Climate change has global impacts. It's not just tied to the United States. It's not tied to any one community. When I was in Nantucket, we were doing a keeping history above water workshop. And at that time, there was some colleagues that were from the University of Florida, and they talked about this work in the Caribbean, they talked about the fact that Trinidad and Tobago was one of those places that had a very significant impact in terms of sea level rise, erosion, climate change was impacting their historic built environment and the National Trust Trinidad and Tobago was at that time looking for funding, but certainly identifying the need for resilience plan as a priority, because we had been pretty successful with his community engagement process. Using keeping history above water using our community values assessment tools, we thought this might be a good opportunity to take it away from mainland and see if it would apply in other island communities. I think that was what the opportunity presented itself to be when we were working in Nantucket, we're dealing with a National Historic Landmark Island community, taking those same strategies for adaptation and seeing if it could work for historic sites in Trinidad and Tobago. So working with the University of Florida, making it through the pandemic, we managed to come out the other side with a project still intact and an opportunity to work with the National Trust Trinidad and Tobago and his partners. Okay, Lisa, so why are we partnering? Why did you reach out to the podcast to cover this conference? You know, Doug, we got such a good response in St. Augustine to the podcast, I just had to do it again. I mean, podcasts are an effective tool. It's not a boring 200 page report. It's not something that sits buried in an appendices on a website. Really, it's alive, and it can continue to be shared. And people will find interesting voices being represented from any community that is participating in it. So I think podcasts are a really effective tool. It's to me, it's a must have in your communications toolkit. If you're talking about climate adaptation, or climate planning, and it was just a natural go to, for me to contact you and say, Listen, we need to share some voices from the community and from the experts. So how about coming along to Puerto Spain and joining us, it wasn't a hard sell. And I liked your thinking, I just like to throw into it. And I like to say that it's a nice way for a conference to live way past when the actual event occurred. And you're sort of expanding exponentially in, in some ways, the number of people who attend the conference, because they're hearing a lot of the highlights and a lot of the guests there. So yeah, I do appreciate people like you who recognize the value of podcast and getting these messages out. So Lisa, I'm gonna get you back on at the end of the episode after we go down to trade and Tobago, and then afterwards because we're going to do a bit of a wrap up. So I'll see you down there in Trinidad Tobago, and don't forget your sunscreen. Looking forward to it. We'll see you there.



Doug Parsons 08:16 Hey adapters, I'm back and I'm with

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Cheri-Ann Pascall 08:24

Cheri-Ann Pascall. Tour Guide.

# Doug Parsons 08:27

Okay, so what do you do as a tour guide? How is it the island and who are you giving tours to?

# Cheri-Ann Pascall 08:32

Well, I do tours all over Trinidad and Tobago, because of course it's a republic, twin Island Republic that is. So I find myself going from north to south east to west doesn't matter sharing the cultures of Trinidad and Tobago.

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# Doug Parsons 08:46

Alright, so that's one of the reasons I'm interviewing us. I want to just ground people on the basics of Trinidad Tobago, because I've been talking to people about cultural history and such but let's just get some fundamental facts here. How many people live in Trinidad Tobago? 1.3 million people. Okay, people don't realize but I mean, it's Trinidad and Tobago. Tell us a little bit about that. There's a second island. How are the islands different? Alright, so

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# Cheri-Ann Pascall 09:07

historically, we are quite different. Trinidad is a mix of African Indian, Spanish Syrians, Lebanese, while Tobago mainly are descendants of people who were enslaved Africans.

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### Doug Parsons 09:20

Okay, tell me a little bit about the economy. What are people doing here? Oil is a big part of the island to just elaborate on that.

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# Cheri-Ann Pascall 09:27

All right. So Trinidad and Tobago is essentially an oil and gas based economy. So we depend heavily on that. However, tourism is something that we are definitely getting into can most people when they think about tourism, they tend to focus your attention on Tobago because it has the sun, sea and sand factor. However, because of our cultural mix, because of all these various peoples in Trinidad, we find ourselves selling the various aspects of Trinidad culture. So it's not Just kind of a, it's patois. It's the Festival of Lights, all the things that was brought here by all the people that settled in Trinidad.



# Doug Parsons 10:10

So carnival you win in America, most of us think of Brazil, but it's actually a really big deal here

in Trinidad and Tobago, and I think some of its origins are here. Yes.

# Cheri-Ann Pascall 10:18

So we consider ourselves to be one of the oldest countries that celebrate the mass, as we call it. And that was because of the settler population that took place in 1783. That brought a number of Catholics to Trinidad. So before they entered Lent, what they would do is have these masks balls, and they would put on costumes. And so it started with four days of celebration, and then they would enter into Lent by having Ash Wednesday. Now, what makes our maths different maybe from Brazil is that it's all inclusive. It does not matter what your size, it does not matter what your age, it doesn't matter what you look like. It's all about everyone enjoying it. So you don't have to go to school, to learn the dance. It's all part of our culture. And we embrace all cultures and all peoples when it comes to carnival.

# Doug Parsons 11:12

Alright, this might be a little bit tough to describe, but geographically, this is a big island compared to other islands in the Caribbean. And where are we located, but just give us some idea of how Trinidad Tobago sort of a different island system in the Caribbean.

### Cheri-Ann Pascall 11:23

Alright, so when you think about Miami, the keys, so you have the keys up in the north, and Trinidad is the last island that is closest to South America. As a matter of fact, we're just seven miles away from South America. So we're going to consider ourselves you know, the jewel on a chain, essentially that pendant so we are the last one. So on our east coast, there's no landmass between us and Africa. And on the west coast on either ends, you have Venezuela, which we are just seven miles away from and then we have to be ago just on the north eastern side and you have all the islands going up until you get to the keys we have what is called island life and continental life because we will once part of South America.

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### Doug Parsons 12:10

Okay, tell me a little bit about it because you're not obviously gonna be able to say all of it, but the wildlife I when I associate islands, it doesn't necessarily have all the things that like let's say South America has and Central America, but you actually do have quite a few different things here. All right.

### Cheri-Ann Pascall 12:23

So this is when we talk about our continental life and that is what makes us different from the other islands we will one spot of South America. As a matter of fact, there's a school of thought that we are like the spirit end of the Andes Mountains. So our flora and fauna is rich and diverse. So for example, you have over 700 species of butterflies, over 400 species of birds, eating different types of hummingbirds. We have 40 different species of snakes, four of them

are venomous. We also have the loudest creature other than the blue whale, we have the howler monkeys and so on here. So our diversity is simply because we will once connected to South America.



# Doug Parsons 13:05

Last question, do you have a favorite spot on the island?

# Cheri-Ann Pascall 13:10

No, that is a good question. My favorite spot would be the village I grew up in. It's a village on the north coast called Blanchard. So on our North Coast, you have the Caribbean Sea and in that very mountainous area. You have many waterfalls so I find myself doing hikes to various waterfalls on my favorite being Avoca in the village of blondes. Yes. We have mermaid pools you have these wonderful spots of greenery and beautiful turquoise colored waters in our rivers. So yeah, for me, it is that nature part of us in the village I



# Doug Parsons 13:45

grew up in called lashes. Thanks for joining the podcast.



### Cheri-Ann Pascall 13:49

You're so welcome. I'm so glad I was able to share this something about us.



# Doug Parsons 13:57 Hey, adapters, I'm back.

Margaret MacDowell 13:58 I'm Margaret MacDowell.



# Doug Parsons 14:01 What do you do here?



Margaret MacDowell 14:01 I'm the chair of the National Trust that's hosting the conference.

# Doug Parsons 14:05

Tell us a bit about the National Trust. What do you do? Okay, well, we



### Margaret MacDowell 14:09

supposed to be promoting heritage about that is all tangible heritage with a built and natural heritage.



# Doug Parsons 14:17

So what would you say your role is as chair? What are your responsibilities?



### Margaret MacDowell 14:21

We don't have many staff members. So all of the council members all work. So I am supposedly the chair, but I'm also I'm an urban planner. So I do any of the urban planning work that has to be done and I'm because of my age. You know, I'm the mentor. I'm the old grandmother mentor type person.



#### Doug Parsons 14:42

Oh, that's funny. So urban planning. That's your background. I've had conversations with people here from Trinidad Tobago. Is there a tradition of urban planning in Trinidad and Tobago?

### Margaret MacDowell 14:51

Not really there are a lot of planners, but many of us that there is a local local university has started to train planners. So we now have a lot more planets, and we have we are around, but we are not really I'm very well remembered until there's a problem, we tend to clean up.



### Doug Parsons 15:10

So what are some of the cultural resources at risk of climate change in Trinidad and Tobago?

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### Margaret MacDowell 15:16

Okay, well, first of all, and that's why this conference, most of our treasures are on the coast, because that's where most of us live, you know, we keep our Hills for enjoyment, etc. And people are starting to live on the hills, but they're very steep. And there's a lot of erosion so

that most people tend to settle in the coastline. And of course, all our most of our major buildings are in the cost. And of course, a lot of our lands, our marine environment is, of course cost. And so it's we're very susceptible to sea level rise in particular.



### Doug Parsons 15:50

So who are some of the partners that you work with on these issues?

#### Margaret MacDowell 15:54

Okay, when no, we have this wonderful grant from the US ambassadors funded for cultural heritage. And we're working with the University of Florida, who employed the Craig group, also to Florida, all over America. And they are working with us to do a lot of research, we're actually doing survey work, because a lot of times we talk a lot, but we don't really understand what we're doing. So they're here doing quite a lot of surveying, and giving us some models so that we can see what would happen at different levels of sea level rise, so that we can make decisions as to whether we have to do some kind of adaptation, whether we're going to abandon some of our heritage, or what we're going to do.

### Doug Parsons 16:37

Okay. Do you feel that at large, the people of Trinidad Tobago understand what's happening with climate change on the island?

#### Margaret MacDowell 16:44

No, yes, in the last few years, we've had unexplained flooding. We've had much more rain than we usually had. We are having major problems with the our wetlands, our some of our coastal areas are disappearing is particularly in the southern part of Trinidad and Tobago, and, and a little bit into being but mainly Trinidad, we've had major major landless, so yes, people are beginning to understand.

### Do Do

### Doug Parsons 17:11

Okay, so you had mentioned you got this ambassador's grant to work on this. But more broadly, this is a keeping history above water conference, why work on these issues now?

### Margaret MacDowell 17:21

Well, now is as good a time as any Well, we got the grant. But in addition, we were getting very concerned, we have several properties all over. Well, Porter spin is, is our capital and our board has been is right on the coast. It is a port city, and therefore many of our major buildings. So we started with the buildings, we also have in southern part of Trinidad, there's this very sad

picture of a statue sort of collapsing into the sea, which is often used. And so we recognize that it was no use just listing buildings and be very passive, we had to be very active. And that's why we're doing this.

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# Doug Parsons 18:00

Okay, so we've seen quite a few presentations. Is there anything new that you've learned?

# Margaret MacDowell 18:04

Oh, yes. Oh, my goodness. Well, that was I just came out of the presentation on the coral reefs. And I thought that was tremendous. And it reminded me again, that our coral reefs and our mangroves help to protect our coasts. And I kept thinking about, well, only we have a little island that National Trust managers, and I was thinking, you know, we were thinking of starting to create riffs. And what I was hearing is yes, you can actually start to grow your own riffs. So that was something that really impressed me. Every single one of the presentation so far, I've gotten something. So I'm very excited so far.

# Doug Parsons 18:40

Okay, so you have a team there at the trust, let's say next Monday, what are you guys going to do next? This must give you a lot of energy and ideas.

### Margaret MacDowell 18:47

Oh, my God. Okay. So we only have five heritage professionals that are doing this kind of work. We have others we have the people in in property development and management. We have the people who are doing tours, but the ones that are going to be most affected are the heritage professionals who are they are looking in particular at what sites should be listed what sites we should monitor, so that I think we're going to have a low poll and Monday to see how we're doing and what we can now do and what is the first thing we want to do. And I'm sure we love a lot of ideas.

### Doug Parsons 19:20

Okay, if you could, and this is going to be difficult, but if someone was visiting Trinidad and Tobago, and you could recommend just one cultural resource to visit well, would it be

### Margaret MacDowell 19:28

oh my word. This is difficult. I would probably recommend our Nelson island because Nelson Island has a little bit of everything about our history, starting from the time before slavery, with the first peoples coming through. And then the slaves and and a lot of the buildings and these are the rock structures were done by them. And then it was a place where most of the indentured Indians when they came into the country, they pause there. We had even the Jews were incarcerated there. A labor leaders were incarcerated. So we have all kinds of types of history. So I would suggest that's an island.



# Doug Parsons 20:07

Well, thanks for participating the podcast. Yes,



# Margaret MacDowell 20:09

right. This is great. I'm glad you're doing this. And I hope you continue to come up with some very cool ideas for us. Thank you.

Doug Parsons 20:22

Hey, adapters, I'm with



# Martin Perschler 20:24

Martin Perschler particular program director of the US Ambassador's Fund for Cultural Preservation at the US Department of State. All right, so why are you here at this conference? I'm here at this conference to observe and to participate this conference keeping history above water. Trinidad and Tobago was a conference that is supported in part by a grant that we awarded to the National Trust of Trinidad and Tobago. Tell me a bit about that grant. What



# Doug Parsons 20:46 is that program?

### Martin Perschler 20:47

Sure, the program the US ambassadors for Cultural Preservation, it is a program that we run through our embassies in over 140 countries around the world where we will work grants for the preservation of cultural heritage, anything from the restoration of historic buildings to the documentation of endangered languages.



### Doug Parsons 21:05

So what was attractive when they applied for this grant is keeping history above water model to you?



### Martin Perschler 21:10

Well, what was really attractive to us was the progressive thinking that went into the into the proposal. Usually we are responding to the damage in the aftermath of disasters like typhoons, hurricanes and earthquakes. And what was really intriguing about the National Trust's proposal they were wanting to get out in front, they were wanting to conduct a systematic survey and study of some of their heritage sites and the potential climate change impacts that they might have to address in the future. And we really loved it because it is so much more cost effective to prepare for disaster and to mitigate risk in advance than to repair or cleanup afterwards.

### Doug Parsons 21:53

Okay, we've seen quite a few presentations here, what stood out for you, how did this fit in to why you awarded the grant in the first place?

# Martin Perschler 21:59

Well, you know, what really stood out for me was the intersection of natural heritage and cultural heritage, you know that the impacts are serious, and potentially devastating and life altering whether we're talking about coral reefs, or when we're talking about historic districts, one of my takeaways is that it's it will be important for us, number one, to think holistically, whenever we're approached with a project idea that involves the conservation or the protection of heritage in an area where climate change impacts are already being observed or where those impacts are imminent, and also to consider the role that nature that things like mangroves, and grasses can play in the protection of our cultural heritage, our sites.

### Doug Parsons 22:42

So there's this whole notion of this keeping history but water as a model that they apply for this grant. But why did Trinidad and Tobago get it? I mean, they were the partner here. That's a big important part of how you accept it, right?

### Martin Perschler 22:52

How did they get it? Well, you know, they applied for it, obviously. And what was really appealing to us, it was the really the first application we'd received where anyone was wanting to be proactive. And we thought, wow, this is based on a time tested model for a conference about climate change and cultural heritage that has been taking place in the United States for years. And this was the first opportunity for us to support it overseas in a country where our program is active. And I'm so excited about the possibility of being able to use this as a model for conferences in other parts of the world, whether it's elsewhere in the Caribbean, or perhaps in the Pacific Islands, or maybe even in coastal communities in South Africa, or in South America to take this on the road as a way of helping raise awareness of the threats to culture and to cultural heritage that we're facing.

Dour Darcone 22.10

#### Dudy raisons 23.40

Okay. On that note, it's still a pretty competitive grant program. There's not enough money to fund everyone. What advice would you give out there? I mean, you just mentioned some countries that you'd like to potentially see this in. But people out there listening, it has to start somewhere, what groups need to really think about how should they partner when they even think about submitting a grant proposal?

### Martin Perschler 24:00

That's a great question. And thanks for asking, you know, our program runs on an annual cycle. So we receive applications and award grants one time per year, but we encourage any organizations and is interested in applying to start the process early into contact our public diplomacy teams and our embassies. Because often, strong applications require several iterations and a lot of back and forth our embassies are our contacts in country but embassies reach out to us in Washington DC to if they have questions about proposals and whether post activities are something that we can support. In a nutshell, my advice is for interested applicants to start early and touch base with our embassies and not necessarily wait for us to put out the call but to consider it a continual process. What stood out about just being in Trinidad Tobago for you anything unique or you learn? Well, one of the things I love is how friendly and inviting people are here, you know, I go back to my ride from the airport to the conference at the very beginning and how the entire ride my driver was, you know, telling me where to go what to do follow it up with The device via text and just at every turn, I felt very welcome. In addition to the beautiful scenery, the ocean views, the countryside, the culture, the food, obviously, for the first time in the Caribbean really, for me, I'm really glad I started here.

### Doug Parsons 25:16

I think that's the thing with taxi drivers, I was told I have to go to a dozen different places he took me I got in at midnight and he took me to some places. I haven't been able to visit any of them. I feel bad, but I got the same thing. They were very friendly and giving you a quick cultural history. Well, you

### Martin Perschler 25:33

know what, I don't feel so bad because now I have a list of places to hit the next time I come here and that's what I am going to leave with is the intention of coming back maybe for work. Maybe as a visitor as a tourist. I spent most of my time here in Port of Spain, but for a small island, it sure has a lot to offer. And so I'm looking forward to it sometime exploring more. Thanks for coming on the podcast. Thank you for having me.

# D

### Doug Parsons 26:02

Hey, adapters on back and I'm with Dr. Clary Larkin. Hi, Clary. Welcome to the podcast.



Dr. Clary Larkin 26:07

Hi, Doug. It'sso great to be here.

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# Doug Parsons 26:09

Tell us a little bit about yourself. Where are you based out of?

# Dr. Clary Larkin 26:11

I'm the director of the Historic Preservation Program at the University of Florida. Before I became director, I practiced as an architect, mostly working on historic buildings and in historic communities throughout Virginia and New York City. And then in 2015, I came to Florida for my PhD in urban planning and historic preservation. And really since then, I've been very interested in working with underserved communities, and a lot of them are really dealing with a lot of environmental justice and climate change issues.

### Doug Parsons 26:46

Alright, let's talk a little bit about the work that you do. They're at the University of Florida, and you have the historic preservation team. And you're doing field visits here in Trinidad and Tobago, right? Yeah, we have

# Dr. Clary Larkin 26:55

a grant from the Department of State Ambassadors Fund for Cultural Heritage Preservation to really assess the historic sites that are stewarded by the National Trust of Trinidad and Tobago, and to really look at how vulnerable these sites are for sea level rise, flooding and climate change. So we've been visiting Nelson Island, which is a historic site that has been used for immigration for prison and the sights downtown in Port of Spain, the historic train station, the St. Vincent Jetty lighthouse, and a historic Fort right adjacent to both of those other two sites.

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### Doug Parsons 27:36

Okay, so some of these site visits without going into too much detail, what were some of the findings about the conditions and vulnerability of these resources?

# Dr. Clary Larkin 27:44

Well, I think it's really interesting to think of them in two separate groups. So Nelson Island is offshore and really pretty isolated, you have to get on a boat in order to get there and visit the site. It's a really great place with a lot of history for Trinidad and Tobago, but really, some of the issues that we see there are not so much of the flooding, but more thinking about coastal erosion and use of sustainable materials on the island. Whereas in Port of Spain downtown with

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the train station, and the lighthouse and the for all three of these sites are really clustered together on the harbor in Port of Spain. And if you think about the way that Trinidad as an island is pretty mountainous, these sites are located basically at the base of the mountains of Trinidad. So when they start getting all of these storms, and more frequent rainstorms that they've been getting, the water just runs down the mountains, down the streets, and really sort of puddles up by the train station, by the fort and and by the lighthouse. I think this is really an excellent example of how our infrastructure for stormwater hasn't really been able to keep up with the constant changing and increased flooding from rainstorms. And also that Trinidad, like many places, has a lot of asphalt and concrete and what we call non permeable surfaces. So the water just runs on top of it, and it doesn't actually go into the ground.

### Doug Parsons 29:19

There are other Caribbean nations here. But what are the challenges and opportunities of conducting Historic Preservations in a developing country like Trinidad, Tobago and some of these other countries that are here?

### Dr. Clary Larkin 29:28

Well, I think what's really exciting about being here with other countries in the Caribbean is that this is really the first time that the US Department of State has funded a project for the Cultural Heritage Fund. We're hoping to really build some relationships and partnerships with other Caribbean islands here and really think about how we can learn from each other and provide a knowledge exchange. Every island in the Caribbean is really facing similar challenges. As whether it's stormwater infrastructure, whether it's rising seas, and they all have really proud heritage, both tangible like in the forms of buildings and sites, and intangible such as traditions and crafts and trades and knowledge. And so it's really a great opportunity for us all to learn from each other and to share best practices for resilience and historic preservation.

### Doug Parsons 30:26

So do you have any advice? You've been talking to the team here? They're all very excited. But I think going forward that coming out of this conference, just any advice from your own experiences doing these things?

### Dr. Clary Larkin 30:36

Well, I think one of the challenges that we've realized with this project is that we really have to look at resilience at multiple scales. I've already mentioned things like coastal erosion at Nelson Island, and things like stormwater infrastructure for downtown Port of Spain. Those are large scale sorts of nature based design, landscape and engineering problems that will need to be addressed at those larger scales. But I think we're also looking at how does flooding and water really affect building materials? How does it affect the building, and it's used, what happens when people are stuck in traffic in downtown Port of Spain for an hour because the highway is flooded. So we have to start thinking about resilience at multiple scales. So the site scale, the neighborhood scale, the building scale, and the material scale,

### Doug Parsons 31:31

you are unique, and that you've actually attended previous keeping history above water conferences, not a lot of people here have actually done that. Tell us a bit about what you thought of here, the one here in Trinidad and Tobago, and the previous ones that you've attended. Sure, so

# Dr. Clary Larkin 31:43

keeping history above water has really established itself as a great regular event for those practicing in the realm of heritage and resilience. And for those who want to learn more, I attended the one in St. Augustine, as well as the more recent one in Charleston. And I think something that really strikes me as a practicing preservation architect and an educator is that a lot of places are battling these same challenges. And having a keeping history above water conference is a real place for everyone to come together and to learn from each other. I think what's different here is that this is the first time that keeping history above water has been outside of the United States. And not only that, in the Caribbean, we have heard from some people in the Caribbean about projects that are happening throughout the region. And I hope that it's just a little bit of the door opening so that we can start hearing more about what's happening across the Caribbean region and the multiple countries that are involved in resilience in the Caribbean.

# Doug Parsons 32:53

Before I let you go, they've arranged some fantastic field trips for us. Tell us a bit about your sea turtle trip.

# Dr. Clary Larkin 32:59

Oh, the sea turtle trip was amazing. And I highly recommend it for anyone visiting Trinidad, we went to watch the leatherbacks create their nest and lay their eggs. And it's a bit of a trip across the island and through the mountains and you go at night. And you know you have the red light flashlight so you don't disturb the turtles. But it's really such a great way to understand that we're sharing the island and the world, with nature and with other living beings. And it really sort of brought to mind that there's a good reason why we need to be resilient and why we need to think about nature based solutions and building with vernacular materials because we really aren't the only living creatures on this earth. So I highly recommend that for anyone who visits Trinidad.



#### Doug Parsons 33:50

Fantastic. Alright, Clary, thanks for joining the podcast.



### Dr. Clary Larkin 33:53

Thanks so much for participating with us. We really appreciate

Doug Parsons 34:01 Hey, adapters, I'm talking with



# Kishan Kumarsingh 34:02

Kishan Kumarsingh of the Ministry of Planning and Development at the government of Trinidad Tobago.



# Doug Parsons 34:07

All right, tell us a bit about what that means. What do you do there?

# K

# Kishan Kumarsingh 34:09

Okay, I'm head of multilateral environmental agreements, which means that I coordinate the implementation of the various conventions, environmental conventions that we are signatory to, as well as coordinate negotiations, the various conventions that are held under the auspices of these various agreements.

### Doug Parsons 34:25

I really enjoyed your presentations. And I know we can't cover that much ground. But can you give some highlights just for my listeners?

# K

### Kishan Kumarsingh 34:31

Well, the thing is that climate change is real is here. It's not ahead of us. It's above us. We need very ambitious action globally and nationally as a small island developing state to not only mitigate against the effects of climate change, but certainly reduce our carbon footprint because we are an oil and gas producing country and we have a relatively high per capita emission of greenhouse gases, and therefore climate action is at the top of the agenda that needs no urgent attention more than ever.

### D

# Doug Parsons 34:59

So you You highlighted the notion of build back better, I want you to explain what you meant. And you also talked about engineering being part of the solution or could be part of the problem.

### Kishan Kumarsingh 35:08

Yes, well with every manifestation of a climate extreme or climate risk, there is always some residual loss and some residual damage, and the need to build back to some state of functionality. But in that building back, it must be done in a way that takes into consideration the return of the climate risk that caused the problem in the first place. And therefore, the need to build back better or more climate resilient reconstruction is what is required. Because if we build back the same way, these extreme weather events, these climate risks are going to get more and more frequent and more and more severe and more more intense, with more and more loss and damage. And therefore, integrating climate resiliency into building back better is obviously a no brainer. But what is more important is in building back better the engineering solutions that rectify the problems that are caused or need to take into consideration the climate risks into their designs. Otherwise, we risk exacerbating or increasing vulnerability to the same risks going forward. So for example, there is a road in the east coast of us called manzanilla Maya road that borders the Atlantic Ocean, and the largest freshwater swamp in the country and one of the larger ones in the Caribbean. And the geomorphology of the sandbank that keeps the sea water out is one that is dynamic in itself, upon which the road has been built. And therefore, when the swamp floods out, it goes out to seize the natural flow, it's a sheet flow, and it washes away the road, it has been happening, it has happened three times in my lifetime, with each time with increasing return periods of return. And each time we have built it back the same way, the consequences that is going to wash away again and again. Now if it's going to be built back better than any engineering design must take into consideration the dynamic flow and exchange of water between the swamp and the Atlantic Ocean and the geomorphology of the sandbank itself. So if that is not taken into consideration, then the engineering designs themselves can be a liability and can cost more in in the long term to rectify these impacts. And therefore, you will risk increasing vulnerability, you will risk mal adapting to these impacts. And that is why I said any engineering design must take into consideration the climate risks, and perhaps a 10% conservative measure in those designs to cater for any uncertainty in the climate risks themselves.

# Doug Parsons 37:32

Okay, you've done a lot of international work. How does Trinidad and Tobago compare and let's talk about this climate adaptation planning to some of these other countries that you've been exposed to.

### Kishan Kumarsingh 37:41

A push to adaptation is one of a pathways approach, which means that we assess the climate risks, we formulate intervention options to reduce or mitigate or eliminate those risks, or we implement and then we evaluate and assess the efficacy and then join it with the process continue to build and build back better if I if I have to use that phrase again, while at the same time looking at long term adaptation to climate change in the ultimate objective. And it differs from many other countries that have actually started adaptation planning to a project based approach and planning for adaptation 5060 years from now, the inherent risk there because of the rate of climate change. And because of the uncertainty in the eventual impacts and the temperature at which the you know, the end of the century will settle that means that you're

K

playing a bit of a Russian roulette and investing and getting locked into technologies that may not necessarily be as effective as we would do to a pathways approach where you look and you identify risks, you respond to the risks you we visit when the visitor manifests themselves again, that does two things. Largely, it allows you time to fix any mistakes or any undercard miscalculations that you would have had in assessing those risks and to it reduces the capital costs if you truly integrate climate change International Development. Climate Finance is an issue throughout the world for the developing world and for small and developing seas. In particular, we just negotiated successfully the establishment of a loss and damage fund and funding arrangements as part of the outcomes of capa 27 That will take some time to be established as well. But if fund finance does not make and therefore capitalizing the fund in the way that needs to be capitalized to effectively respond to climate damage and loss and damage is a huge undertaking. So to the pathways approach. We believe that building climate resiliency truly integrating climate change the national development paradigm, because we view climate change as a national development issue, then it builds resiliency over time with long term adaptation and insight and infocus and at the same time minimizes the capital costs that you would normally incur or estimate as a result of discrete project based adaptation for long term climate change impacts.

# Doug Parsons 39:55

Okay, and you also talked about NASA security and climate change from the perspective to Then Tobago, what could be some national security issues that this country has to deal with? With climate change,

### Kishan Kumarsingh 40:04

we have fairly large communities that depend on the natural environment for livelihoods so that the harvest fish and shellfish that they sell, and they live off of it, the impacts of climate change can actually see some of these amenities, some of these resources being decimated, and the populations decreased. So there's increasing competition for diminishing resource that will obviously give rise to unemployment, loss of livelihoods at some point, and therefore, the increase in poverty wherever there is an increase in poverty, there is an increase in frustration and human error, there's an increase in crime, it can also lead to internal migration, where people leave their traditional environment to go to more urban areas to seek employment. And therefore it adds competition for employment, it can also lead to opportunities for illegitimate ways of earning a living that may not necessarily be conducive to civil stability. And therefore it can pose a national security risk if not checked, and if not really kept an eye on. And that is why we have developed a just transition of the workforce policy not only to respond to the unintended consequences of the labor force, largely employed in the oil and gas industry, because we gas economy, largely based on petrochemicals and oil and gas production, not only the unintended consequences of moving to a low carbon economy, but also looking at the impacts of climate change on livelihoods and lives and how that also meshes with the issue of no one being left behind and tying in some of the ideals and goals and targets of the sustainable development goals into that planning structure. So we see climate change as a truly national development issue in all its facets, not only infrastructure development, that cultural development, the city, the socio economic sphere, and the human systems, including,

Doug Parsons 41:51 okay, thanks for coming on the podcast.

Kishan Kumarsingh 41:53 Thank you very much. It's a pleasure.



Doug Parsons 42:00 Hey, adapters, I'm here with Ambassador Candace Bond.

Ambassador Candace Bond 42:04 Good morning. How are you? Doug?



# Doug Parsons 42:06

I'm very excited. This is my first ambassador that I'm interviewing. So thanks for taking the time to talk to America. daps.

Ambassador Candace Bond 42:12 Absolutely. Pleasure to do so.



# Doug Parsons 42:14

So how is the US Embassy here in Trinidad, Tobago, supporting climate adaptation efforts for the island.



# Ambassador Candace Bond 42:20

So one of the things that we're doing is that we have the Ambassador's Fund. Actually, we have donated \$200,000 in grant monies to help preserve the cultural inherited sites of Trinidad and Tobago, which are so important, because these heritage sites are in fact impacted by climate change. And so we're helping to mitigate that erosion and make sure that we are preserving the rich culture and heritage of the country.



### Doug Parsons 42:47

So you're here at this conference? are you encouraged by these efforts?

# Ambassador Candace Bond 42:50

absolutely encouraged by these efforts. This is really a critical part of diplomacy, ensuring that we are supporting our friends and supporting their cultural heritage. Because after all, we have a large shared diaspora there are over 250,000 Jenin begonia lan's in the United States. And so we consider them a large and vital part of our country. And, and also this peer to peer ties and people to people. Ties are really incredibly important for us. So this is what we're here to support.

# Doug Parsons 43:21

So can you see Trinidad and Tobago being a leader in climate adaptation in the Caribbean area?

# Ambassador Candace Bond 43:26

Absolutely. They already are number of their ministries are dedicated to mitigating climate change. And so we're actually working closely with them and also through a multi agency effort to support those efforts, not only for Trinidad and Tobago, but you'll see my counterparts in the State Department and my colleagues that we're doing this throughout the Caribbean.

### Doug Parsons 43:46

And can you tell us some highlights of your experiences at carnival? Oh, absolutely.

### Ambassador Candace Bond 43:50

At Carnival was incredible. It was definitely the biggest party of my life that lasted for six weeks was fantastic. So here when you participate in carnival, they say play maths. So I played maths and had a costume. And, you know, I just paid in all the fats, they have all these unique pan yards across the country. So they call it crawling across the parent yards, and so had a chance to really see how the music and culture really is embedded in the youth of Trinidad and Tobago. And so it's just a really important cultural, magical, magical moment. And it happens every single year. So I encourage everyone to come and celebrate with the Trinbago Indians. Carnival time. It's really spectacular. You know, Mardi Gras is amazing, but this is one that is completely participatory. And it was a beautiful, beautiful event.

### Doug Parsons 44:47

Thank you Madam Ambassador for joining the podcast.



### Ambassador Candace Bond 44:49

Oh you're welcome Thank you so much Thank you for heing here support this work





### Doug Parsons 44:59

Hi adapters, I'm back and I'm with

Dr. Jay Haviser 45:01

Dr. Jay Haviser, director of the St. Maarten archaeological Center in St. Maarten, the Dutch Caribbean.



### Doug Parsons 45:07

So what is the grip you work with? And what do you do? Well, I

### Dr. Jay Haviser 45:10

actually have three foundations. I am the director of the St. Maarten archaeological Center, which is in St Maarten and Dutch Caribbean. I also started the board and air Archaeological Institute on the island of Bonaire and the saiba archaeological center on saiba. So on three of the Dutch islands, I have these foundations that I've started that focus on youth and heritage, however, I've been the archaeologists for the Dutch Caribbean for 40 years. And before that, I actually did quite some work in the Virgin Islands. So I've been doing it a long time. My university affiliation has been with Leiden University in the Netherlands. So it's where I got my doctorate in 1987. And the whole concept that I'm trying to bring to this gathering is that created these three foundations on Bonaire, Sabin, say mark and emphasizing the need to sort of stimulate and inspire young local Antillean youth 14 to 18 years old, to consider not just the sciences as careers and heritage sciences in particular, but an awareness of the value and the importance of doing heritage research. Because my goal and as I presented in this conference, was that I started the first of these programs over 20 years ago. So when they were 1418, then and I was hopefully able to inspire them. They're now in their mid 30s. And they are leaders in their community, there are doctors and lawyers and politicians, I'm very proud to say on Bonaire, the head of the government monuments and archaeology department is a former student of mine, on St. Maarten, the head of the monuments in archaeology department, is a former student of mine. So what I've been trying to do with my career is to inspire and get local Antillean youth who now are leaders in the community to have that foundation of awareness of the value of heritage, why are we saving it, and what it can be used for, in the benefit of the people?

### Doug Parsons 47:11

Can you give me an example of just one cultural resource on the island so people can visualize what you're doing?



### Dr. Jay Haviser 47:17

Well, you know, one of the projects that we've done in all three of the projects, all three of the foundations, which I find so wonderful, because it's a link between nature and culture, is the documentation and preservation of very large trees on the island. We call them heritage trees. And on two of the islands, we've been out actually able to convince the government to make laws to protect them. These are trees that have a base that's over a meter diameter. These are very big trees. So the students we go out, we take a GPS reader, we'd get a GPS Mark, we do a descriptions and photographs, but then all those GPS coordinates as a little dots on a map, we turn those over to the government and the government then in its urban planning or its planning offices, when someone comes from the development plan. They say, you've got heritage trees, and because we've been able to get the legislation they have to adapt to preserving the heritage.

### Doug Parsons 48:11

Okay, so how has climate change changed how you do your job, climate change?

# Dr. Jay Haviser 48:16

I think the bigger picture of how climate change is affecting our job right now is that there is actual physical loss, we can see ruins that are eroding into the sea and disappearing can see aspects of what's going to happen with sea level rise as it comes. These are the things that we are aware of as scientist, but we need to do a really good job of making sure the community and particularly decision makers in the community are aware of these things are happening. We're losing heritage and that we need to take action for

### Doug Parsons 48:51

it. Okay, related to that you are in the hurricane belt. How does that impact the work? You do?

# D

## Dr. Jay Haviser 48:55

We are dead in the hurricane belt. And as a matter of fact, in 2017, the island of St. Maarten was devastated by hurricanes. Irma and Maria, we had been building back actually, the archaeological center on St. Maarten was completely destroyed. And we had to spend weeks with the students actually excavating the archaeological center to get the collections out. We saved about 85% of the collections, anything textile paper, a lot of my documents and early files were lost. However, we did save 85% of the national collections with the students coming out and I want to point out something very important. It's about instilling passion as well to these students like me had gone through the hurricane also. We also had our homes destroyed. We also were in suffering at that moment, and yet they came out and help to save the collections from the center. That's what I'm trying to do is inspire that sense of pride and ownership of heritage because that's really where we have to go heritage of these islands is for the people of these islands. Scientists are welcomed Research, but it's their heritage. And we need to have them to have that sense of ownership and pride with heritage.

### Doug Parsons 50:07

You gave a presentation at this conference. And one of the things that stood out for me is you mentioned how critical nature is to cultural resources. What did you mean by that?

# Dr. Jay Haviser 50:15

Well, nature and culture and cultural resources, we have to find the balance, because we are living in very limited resource environments, islands have great limitations. And we have to realize that, for example, the large trees that I mentioned earlier, if we don't put some sort of protection for these trees, and they keep getting eliminated, we're not going to get those sized trees ever again. So it's about realizing that we're at a precipice in history right now, where there are certain things that if we don't deal directly with protecting them, we will lose them, not just losing will lose them forever.

### Doug Parsons 50:53

So how has this conference been useful to you, networking,

# D

# Dr. Jay Haviser 50:56

what I really appreciate about this group so far, and I had never worked with the correct group, and I really like it. I think Lisa Craig is a very dynamic woman. And I really appreciate the fact that so many other organizations, including the National Trust TT, were part of this. It's the networking for me. So I can meet other professionals from other islands, see what they're doing, find out ways that we can link and do cooperative projects, but also see where everybody is, you know, some are more advanced than others with different programs, some have different funding. It's also a way about finding out for funding resources and stuff like that this kind of gathering for me, it's great that I can communicate, and I hope what I say help some people, but for me, it's really about the networking of other professionals in the region.

# D

### Doug Parsons 51:41

People want to learn more about what you're up to, where should they go, Dr. J,

# Dr. Jay Haviser 51:44

have a sir, you can reach me through our through our Facebook, which would be the St. Martin archaeological Center's CE mark. It's called, by the way, another way easy to reach me. I happen to be president of what's called the International Association for Caribbean archaeology. This is the biggest gathering of archaeologists in the region. And you could reach us through our website and Facebook pages way I yaka I, ACA, International Association for Caribbean archaeology. Thanks for joining the podcast. Thank you, Doug. And I really am glad that America daps is here. Because it's your voice, your ability to take these messages out to



the greater world. That's what we need. What we need is all this to be out there. So it doesn't catch people off guard. You know, it's crazy that the kinds of reports we're doing here, we can see that this stuff is happening fast. Climate change isn't some long term thing. Now it is really happening fast. It's affecting our lives immediately. So your podcasts, it's important to get the word out. So we don't get lackadaisical and sort of sit back and say, Oh, we don't have to worry. It'll be the next generation or another. No, we do have to worry. It's happening now.

D

Doug Parsons 52:59 Hey, doctors, I'm back. And I'm with



Dr. Angela Schedel 53:00 Dr. Angela Schedel.



Doug Parsons 53:02 Okay, so where do you work?



Dr. Angela Schedel 53:03 I work at Taylor engineering in Jacksonville, Florida.



Doug Parsons 53:05

Tell me about some of the roles and responsibilities there.



# Dr. Angela Schedel 53:08

I am a vice president. So I have the opportunity to supervise five different engineers and scientists. And I'm also the resilience lead, which means that I got to invent a role for myself when I started at Taylor to add resilience to all of the projects our company had already been working on over the 35 year history, but taking what I learned from sea level rise and adaptation, and providing that opportunity to all of our other vice presidents and leads.

# D

# Doug Parsons 53:32

Okay, so you came here to give a presentation. Can you just briefly summarize what you were talking about there?



Dr. Angela Schedel 53:36

Yeah, my presentation was on the Bahamas recovery from Hurricane Dorian, which happened in September 2019. I own a house on that island. I did not own a house before Hurricane Dorian. And my husband and my family spent a lot of time helping with recovery. And I think the bottom line up front, the story to understand from it is that the recovery there was led mostly by local citizens, second homeowners, NGOs, and not so much by the Bahamian government.

# Doug Parsons 54:02

Give me some of the challenges that came with that disaster response.

# Dr. Angela Schedel 54:05

I mean, the island is tiny, it's three miles long by half a mile wide. It has 200 residents and it's a very remote tiny island if you can get that picture of very family oriented they don't have the infrastructure the entire power grid collapsed. All of the power lines fell down. There was more than half the houses were damaged severely and needed new roofs or new walls that people had nowhere to live, they had no power. Their water is via cisterns and rainfall. When you don't have a roof you don't have gutters, therefore, you don't collect water and the cisterns are below ground or under the houses which need pumps to get the water out. So people then were challenged with just getting water out with buckets which was pretty contaminated. So that food was brought in water was brought in diesel had to be brought in for generators just for power. So just basic subsistence was difficult. So a lot of people fled the islands, especially the elderly, women, the children to go get kids in school and get medical help but just rebuilding getting materials on the island excavator. There's heavy equipment all requires a barge, there's no airstrip. So just logistically, it's hard to live there anyways, the people are very resourceful, but it was the biggest hurricane event they'd ever had in that island.

### Doug Parsons 55:11

And that sort of event you're thinking more immediate human needs. But did you have time to contemplate the impact and cultural resources? Was that something discussed anytime in this response?

### Dr. Angela Schedel 55:21

Yeah, definitely. One interesting thing about man Anwar is it's known around the Abaco region of the Bahamas as a boat building Mecca. And it is very much known for the origination and the building of the Abaco dinghy, which was used by the citizens to sponge into conch into fish. So that's their livelihood is basically sustenance, tourism being the secondary part of the economy. And I think some of that tourism comes from the Heritage infrastructure that's there, which is the man of war museum, which has a great coffee shop. I call it my local Starbucks on the island, but it's behaving and style as well as the Abaco dinghies that are on the island. There's an older vessel, a big schooner, the William H. Albury, that was one of the last large wooden ships built there. It was wrecked and sunk and it's back there now getting being repaired. But it is a tourist attraction. It attracts people to come and see the opera resale shop, the Manowar Museum, the really old historic little cottages that are 150 years old, that people want to see that heritage. So in preserving that that was a priority to get them up and running quickly so that people from other islands would want to come back.

# D

# Doug Parsons 56:17

You've been a previous keeping history but water conferences gives you your pin. How do you feel like the conference has evolved here, your this most recent one.

# Dr. Angela Schedel 56:25

I mean, the first one I went to was in Annapolis and I had lived in Annapolis for about a decade at that time. And I was so excited because Annapolis had so much flooding, and we were able to bring our lessons learned to people from all over the United States. And then the next one I was in St. Augustine, which was also having flooding was almost a repeat it almost a deja vu. But here in Trinidad Tobago what I'm seeing is we're getting much more collaboration from other nations and I love hearing from the women from Montserrat, the gentleman from St. Maarten, the woman from the Cayman Islands, and being able to collaborate and learn from other people in island nations, how they are coping with sea level rise, climate change how they're adapting, everyone does it a little bit differently. Their culture is all different.

# Doug Parsons 57:06

Okay, so this has branded and it's gonna be moving around. But any recommendations where they might do this next and wine, what would be some themes for that?

# Dr. Angela Schedel 57:13

I think we can learn a lot from Europe, we always put to the Netherlands and our colleagues there, the Dutch of what they have done successfully and keeping history of water and as much as the Dutch have branded that and brought it to the United States to sell their expertise. I think a European venture of keeping history above water would be very informative to people all over the world to understand just how they live with water because most of the country in the Netherlands is below sea level. And while they have giant infrastructure, they also have very small solutions at the building scale that we could learn from

# Doug Parsons 57:42

you haven't gotten yet. You're going today, but give us a preview of the swamp you're about to visit.



# Dr. Angela Schedel 57:46

I'm going to the Caroni bird sanctuary. And from what I understand it is a mangrove swamp. So

it's got Scarlet ibis and flamingos, and we're going on a boat tour at sunset, and it's supposed to be just one of the most wonderful natural heritage. You know, I think that attracts visitors to Trinidad. So I'm very excited to see you.

Martin Perschler 58:03 Thanks for coming on the podcast.



Dr. Angela Schedel 58:05 Thanks so much for having me.



Doug Parsons 58:10 Hey, doctors, I'm back. I'm here with Dr. David Guggenheim. Hi, David.

D Dr.

Dr. David Guggenheim 58:13 Hi, how are you?

D

Doug Parsons 58:15

I'm doing great. So can you tell us where you were?

Dr. David Guggenheim 58:17

I have two roles. I run the NGO ocean doctor in Washington DC focused on protecting the oceans. And I'm also an adjunct professor at Johns Hopkins University, teaching ocean conservation.



# Doug Parsons 58:31

Okay, so your presentation, it was a fantastic presentation, you covered a lot of ground keep it was a big part of it. But can you give us some additional highlights for those who didn't get to see it.



# Dr. David Guggenheim 58:40

I was talking about the fact that the natural environment and the built environment, our historic preservation are really closely linked. The oceans are part of our heritage. But also the natural environment has the ability to protect the built environment. And Mother Nature really is quite powerful. So things like protecting coral reefs, protecting mangroves. If you look at the power

of that, and the cost of restoration being much less than building gray infrastructure, it's a no brainer, pretty much we need to do more to protect our coral reefs and do more to protect our mangroves and all of the other vegetation.

# Doug Parsons 59:25

Okay, so it's very hard, I'm sure because you had a lot of material in the presentation. But Cuba was a big part of what you were talking about in the recent Cuba that are relatively healthy compared to a lot of Caribbean reefs. Why is that what's going on in Cuba that allowed that to happen?



### Dr. David Guggenheim 59:39

I think it's an encouraging message. I think we look at coral reefs and we think of climate change, and that's certainly part of it. All of this bleaching what we saw in the Great Barrier Reef was devastating, and we've lost half of the coral reefs in the Caribbean that's becoming a worldwide figure. So Allah lot of us feel helpless. It's global warming, the reefs are dying. There's nothing we can do about it unless the entire world gets together and controls climate, which is not looking optimistic, at least in the in the short term. But the message is in Cuba, we're finding that doing things locally to protect coral reefs may have an equal if not greater impact on the health of coral reefs. So it comes down to things like nutrient pollution, from fertilizers from fertilizing, our own backyards are big agriculture. So I contrasted what we've done in the United States and all of that awful stuff running off into our waterways, stimulating the growth of algae, and that algae can smother coral reefs in the absence of fish and other invertebrates that can graze that algae off. And the sad thing is, we have overfished those very fish that can save coral reefs. People don't usually associate overfishing, with the health of coral reefs, but that's a factor. So if you look at Cuba, when the Soviet Union pulled out in 1991, after it collapsed, Cuba was really suffering, they had very little food, and they had no fertilizer. And so essentially, they've been practicing organic farming for many, many years. And that has clearly benefited the coral reefs. They're not smothered in algae. And they're not overfishing, overfishing in some areas, but they're fishing in small boats with hook in line. So these are local things that we do have control over. There are many others, I talk about corals as the Princess and the Pea, they pretty much are sensitive, and hate just about every little thing that we do. So we have to be really careful.

### Doug Parsons 1:02:02

I'm sure this would be an interesting debate people in the cultural resource space and people in the natural resource space, do you think it's harder to get people to value one over the other? I mean, not that you want to but do you think people value cultural resources more than do natural resources or vice versa?

# Dr. David Guggenheim 1:02:16

I think the challenge is that the built environment, the cultural resources are things that we see they're very tangible. And when you look at the oceans, which is part of our heritage, they look pretty healthy from the surface, you don't see what's underneath, yery few people go underwater, and those that do may be looking at a dead reef, but to them, they've never seen what a reef is supposed to look like. So there's a real lack of recognition that our oceans are in trouble. So I don't think it's purposeful. I don't think that we value one versus the other. I just think we need more education and awareness about what's happening in the oceans. And then I think this synergy that develops that the restoration of the natural environment can actually come to the rescue of our cultural environment is also I think, a perception and a realization of how important it is to consider both as incredibly valuable.

### Doug Parsons 1:03:22

Okay, let's talk that about that a little bit. You mentioned in your presentation, and you're looking at the global carbon markets. And you get involved with solutions to some of these problems that you talked about how can global carbon markets play a role,

# Dr. David Guggenheim 1:03:33

we're partnering with a group called blue green future. And the concept here is to turn carbon from a cost, which is the way we all perceive carbon into an investment and restoration of mangroves here in Trinidad or around the world. It's not cheap, somebody's got to go in and do it. There's a lot of labor and materials, but the price of carbon is increasing dramatically. And that changes the equation. And so the head of blue green future spent 25 years at the International Monetary Fund. And he's really worked out a new economic model so that you can bring in outside private investment into restoration of natural resources including mangroves, seagrasses and all of these things we've been talking about. And even as an investor even get a return on your investment. So it changes the whole concept of restoration. If you're a local government or state or national government with a need to restore natural resources, you can bring in outside funds to restore those natural resources. But the investors will not own those resources. They're buying the services of those resources. to sequester carbon. It's a very interesting model. It's one that doesn't require new taxes. In fact, it saves the government money. It doesn't require new laws and regulations. Again, it turns carbon from a cost into an investment. And we're working with a pilot project in the state of Florida, we think it would be ideal for the Everglades restoration to really reduce the cost of that restoration, save the state money, really everybody wins.

# Doug Parsons 1:05:34

You've written a book to give my listeners a few details about that.

### Dr. David Guggenheim 1:05:38

The book is called the remarkable reefs of Cuba hopeful stories from the ocean doctor. And so the ocean doctor is both the name of my NGO and the name that my daughter gave me years ago. So it's sort of my nickname.

### Doug Parsons 1:05:52

I'll have a link in my show notes for this episode, if people want to explore that, but thanks for coming on the podcast.

D

Dr. David Guggenheim 1:05:58 Thanks so much.



### Doug Parsons 1:06:03

Hey adapters, , we're back in I'm with Vernaire Bass. Tell me where are you based and what do you do there?



### Vernaire Bass 1:06:10

So I'm based in Montreal, which is in the West Indies. I'm a management consultant here. And I work primarily for the government of Munster as



# Doug Parsons 1:06:18

well. It's great that other islands are attending this conference here in Trinidad and Tobago, can you briefly tell us a bit about your island because each island is is different. We all think Caribbean islands, we think of paradise. But tell us a bit the uniqueness of your island.

# Vernaire Bass 1:06:30

So islands very unique in July of 1995. Our volcano became active and destroyed over the course of 15 years destroyed. three courses of islands are only a quarter of the islands currently inhabitable. Currently, the population is roughly about 3000 people. So we have a very small population. And because of the impact of the volcanoes, probably 80% of the island migrated to the UK, because the volcano erupted continuously for 15 years. The last eruption was in 2010. So now we're in the process of rebuilding all of the infrastructure of the island because Plymouth, which is the capital city of the island was right in the past as a volcano. So not only did we lose our port, but we also lost that airport as well. So now we're in the process of rebuilding our port, I think it was in 2008. We're able to access the island by AirPlay we're currently able to access island by boat, but we have a very small port. So they're currently building a new one.

### Doug Parsons 1:07:32

Wow, quite unique challenges. I didn't realize it was such a slow rolling volcanic distraction. And we've talked a bit more before this interview about some of that I didn't realize that in the population I didn't get it was that tiny. So it must be hard to rebound from such a dramatic event.



# Vernaire Bass 1:07:51

Absolutely. And especially with a small population, it's difficult to rebuild. One of the issues that we face here. And one threat is that even though our populations are nice, 3000 people I'll say 70% of those are now migrants, so people who have migrated to the island from other islands within the Caribbean region, mostly for employment opportunities. But also, Australia is a gateway to the UK because if you don't know anything about Munster, we're also a UK overseas territory, which means that we receive about 60% of our financial aid from the UK, and other 40% is made up of taxes. So if you stay on that island for about six years, you can technically migrate to the UK and become a British citizen. So we have this constant influx of people. So we also have migration that's always happening.

### Doug Parsons 1:08:36

Alright, I want to come back to that, because I think it's very interesting and very relevant to some of the things that we can predict will happen with climate change. But first, we're here at this keeping history above water conference in Trinidad and Tobago, what brought you here.

# Vernaire Bass 1:08:48

So I came because one of the roles that I have as a consultant here on the island is to work with the Montreal National Trust, and that is to demonstrate National Trust responsibility is really to maintain all of our heritage sites, but also to maintain the history and culture of the island and was to preserve it going forward, because we lost a lot of it during the volcanic crisis. And one of the reasons why I wanted to attend the conference also was because I think that most of the impacts of the volcanoes quite similar to the impacts of climate change. So it was interesting to be a part of the discussion.

### Doug Parsons 1:09:22

Alright, let's just jump into that then though. Because you I don't know if there's any presentations that really stood out for you, that was helpful for you. But if a lot of what do you think of islands and climate change and sea level rise, this whole notion that you're going to have to have the population migrate. And so the volcano actually was, it was a dramatic test run, but in some ways, I'm assuming you're there's gonna be lessons learned for how you're gonna have to react to climate change.

### Vernaire Bass 1:09:45

Exactly. So one of the main things that jumped out to me it was when we had the discussion about fourth migration, and also the issue with most of the heritage sites being close to the coastline and we lost a lot of our heritage sites during the volcano for that reason, because obviously when The volcano erupts is heading towards the sea to cool down and Alan has actually grown because of this process. So it was interesting to see the different perspectives



also with the impacts of climate change on things like the coral reef, because the volcanoes also affected our coral reefs, what we found is that sometimes they're able to evolve and to get past the issues caused by the dashboard. So those are some of the issues that really jumped out. Yeah,

# Doug Parsons 1:10:26

yeah, it's in my head right now I'm circulating, what an odd situation, of course, the volcano, and you're just saying the islands actually growing and we usually associate with sea level rise, these islands are going to shrink, and you kind of had the opposite effect. And it's created its own issues there. Yeah. So

# Vernaire Bass 1:10:41

the thing is, we're having a combination of the two. So on the northern side that currently and habitable, we're having issues with coastal erosion as well, which is something that we're seeing throughout the region. So right where the museum is located, for example, and where they're planning to build a new city. We're experiencing coastal erosion there. So on the south side, and the east side of the island Island is actually growing because of the pyroclastic flows. But on the northern side of the island, and parts of the island that have existed for obviously, billions of years, we're experiencing that coastal erosion as well.

# Doug Parsons 1:11:11

That's absolutely crazy to think about. There is a great documentary to be had here. I don't know if there's any are there? Did anyone do anything like that? Are there any resources like that where people can kind of visualize this,

# Vernaire Bass 1:11:21

but there's been numerous documentaries on the island, mainly focusing on the volcanic activity and the impact of the volcano on the island itself. Like I said, the island has grown dramatically, but it's grown in different ways as well. So we have the power of plastic foil, which is all of the molten rock and things like that, that come out of the volcanoes. But the other way that Ireland has grown has been as a result of mud flows and lahars. So what happens when you have a volcano and you have all that seismic activity, that earthquake constantly happening by the volcano, and because we're also in the Caribbean, we experienced natural disasters and hurricanes on an annual basis during the hurricane season. So what happens when we get lots of rainfall is that all of the mud and the rocks that are around the volcano become unstable, and then they come down just quite similar to a pyroclastic flow. And that has also increased the size of the island, so unsay the South East Side islands been increased by the pyroclastic flows. But on the other side, the north eastern side of the island, it has grown, but it has grown because of mud flows, and lahars. So there's a lot happening on the island all at once. So I think it's a very interesting case study when we're thinking about climate change. And obviously, when you think about things like air pollution as well, with the ash, the air was constantly polluted with the ash. So we had to deal with that as well. So you have a lot of carbon dioxide in the atmosphere, for example, wow.

# Doug Parsons 1:12:45

Well, okay, here at the conference, you're learning from your peers and other people from other islands? What are you taking back home? How is that going to influence what you do there?

# Vernaire Bass 1:12:55

Well, I'm taking him back home really is a lot of I was really fascinated by the presentation. So it was basically where they were building these artificial barriers to stop the coastal erosion, I think that is something that we should definitely listen to, because for example, in the north of the island, it would be very useful to have that because again, when all the rivers start flowing into the ocean, and then also the oceans coming in further inland is actually affecting things like you know, when we have curls when this thing, but also, it's affecting one of our main arrows, that actually helps us to distribute food around the island and stuff like that. So it was really interesting to see also the case studies of Puerto Spain as well, the fact that for sustained is almost more or less underwater, and you know, all of the laser photography that they were using to see how the future impact that climate change will have on the building. So I think those are kind of the main takeaways, not only focusing on the problems, but looking at some of the solutions that we can use here on island.

# Doug Parsons 1:13:53

Okay, last question. If someone was visiting your island, what spot would you recommend that they go?

# V

# Vernaire Bass 1:13:59

If someone was visiting the island, I'll definitely recommend that they go and see the very city because I think we call it our modern day Pompeii. And it's really interesting to see the impact of nature and to see also not just the devastation that it caused, but also to see how the island was created in the first place. So I definitely recommend that they go to see the very city which we're hoping one day will become a World Heritage Site.



### Doug Parsons 1:14:25

Very cool over near. Thanks for coming on the podcast.



Welcome. Thank you very much for having me. It's a wonderful opportunity to be on the podcast to be in the presence of so many professionals.



# Doug Parsons 1:14:41

Hey, adapters, I'm back and I'm with Jeff Goodell. Hey, Jeff,



# Jeff Goodell 1:14:44

Hoyou doing? Good to see you.



# Doug Parsons 1:14:46

Well, you gave a presentation today. Can you give us some highlights?



# Jeff Goodell 1:14:49

Well, I just tried to talk about sea level rise about what I learned from the years of reporting my book that water will come my focus was on basically how fast is So the RC is going to rise, how do we deal with the kind of uncertainty of it, and what kind of things we will do to try to adapt to those rising seas? And you know, my basic argument was that we're going to do a lot of brilliant stuff and create a lot of really new, interesting coastal ways of living, and we're going to do a lot of really dumb stuff that's going to waste a lot of money and cause a lot of suffering and hardship. And, you know, ended up with this question of the most difficult questions. I think with sea level rise and coastal adaptation is about, you know, who and what is going to be saved?

# D

### Doug Parsons 1:15:31

Is this your first time in Trinidad and Tobago? It is? Yeah. Any sort of thoughts or insights relate to what you do?



### Jeff Goodell 1:15:37

Well, Trinidad is it kind of almost embodies in a very profound way, the difficulties of dealing with the climate crisis, I mean, you were here we have a country that is, I think 40% of their GDP comes from oil and gas, they have one of the highest per capita co2 emissions rates in the world up there with Kuwait and places like that. And yet, it's an island state, highly vulnerable to sea level rise, most of the settlement is in low lying areas that have been built on landfill, it is a very vulnerable place that is very dependent on oil and gas. And they need to manage the transition both away from fossil fuels, and adapting to the changes brought from burning those fossil fuels, which is a very complicated passage.

### Doug Parsons 1:16:21

It's been 10 years since article goodbye, Miami, you said this in your presentation. But can you give some more observations? What's changed since that articles come out?

# Jeff Goodell 1:16:29

Well, you know, teaching in the 10 years since I first wrote about sea level rise, you know, I first went to Miami in the aftermath of Hurricane Sandy in New York thinking about, you know, water will do to a city. And at the time, when I went to Miami, I went there the first time, on a day of sunny day, flooding was sending two feet of water in Sunset Harbor, which is one of the sort of wealthiest regions of Miami, and it became very clear to me that this city and many other coastal cities were in big trouble. And that kind of launched my book. And at the time, you know, there was a lot of naivete about how people were going to deal with this. I had urban planners in Miami, tell me oh, we're just going to raise the whole city two feet, and we'll be fine. I'm like, Well, what do you mean, raise the whole city two feet? And he's like, oh, yeah, it's like, I've talked to engineers, we can raise buildings. That's not a problem. And that was a very profoundly kind of simplistic and naive view, because of course, raising buildings as possible, but raising roads, how it changes, drainage patterns, how you deal with airports in South Florida, things like nuclear plants sitting right on the coast. So it was if there was a lot of naivete. In the 10 years, things have gotten much more sophisticated places like Miami and other places have gotten much more sophisticated in their thinking about how to adapt, there has been a lot of money, a lot of plans, written a lot of engineering projects, you have the IDI can use and things like that. We have lots of interesting projects happening in Norfolk, but it's not happening anywhere near fast enough. And the we have not even begun to grapple with the most complex challenges, like getting people out of harm's way retreating from areas, the questions of justice and equity and how we build protections from sea level rise, and most cities has not even begun to be grappled with. So I would say we're at the beginning of the beginning of the beginning of this.

### Doug Parsons 1:18:16

You use the term big dumb wall. What did you mean?

# Jeff Goodell 1:18:19

Well, I mean, you know, when we think about sea level rise, and you think about what to deal with how to deal with it, the first instinct is to build a wall. I mean, that's how humans have dealt with all kinds of things. They want to keep out whether it's, you know, marauding invaders in a fortress in the mountains or rising seas on the coast, and you have agencies like the Army Corps of Engineers, who are basically responsible for a lot of large mega projects in the United States. And their instinct is to pour a lot of concrete and build a lot of walls. And it's also easy political sell, because people look at a wall they think, oh, okay, I'm safe. There's a wall. And it's the default mechanism for engineering on coasts. And it is a very flawed idea for many reasons. Among them is that how high a wall do you build sea level rise is very uncertain. When you build a wall just pushes the water somewhere else. It's a kind of false illusion of safety. And most importantly, there's this question of who gets the wall and who doesn't? As I



said, in my talk, if you're in Manhattan and the wall goes up to 51st street and you live on 52nd Street, well, why does the wall stop there? And if you live in Red Hook, you wonder why is lower Manhattan getting a wall and we're not and it just underlines and accentuates the questions of equity and justice around us.

### Doug Parsons 1:19:41

during your presentation. You were showing some maps of sea level rise and impact on Trinidad Tobago and some stuff that you were able to find and it got me thinking neither of us have spent much time on the island but I have talked to some of the locals and I am just absolutely surprised how I guess integrated a very this is a very diverse nation, people from all sorts, and they're doing relatively good Job living together. It's not perfect. And it got me thinking about social resilience. How do you think Trinidad, when you think about migration from other islands? Are they in a better position when you think about what's coming? I don't

# Jeff Goodell 1:20:12

really know about that. I can't say that I have expertise in any of that. You know, Trinidad is a country with a long history of migration and immigration here. That's one of the most interesting things about it, to me is the incredibly diverse culture here. But at the same time, it's a small island state, it doesn't have huge resources of the development is in a lot of low lying areas. I went for a drive yesterday out to manzanilla Beach, where I saw the whole road had been wiped out from rising seas, and there was a long landscape of abandoned homes and homes falling into the sea. I mean, I went to see the leatherback turtles that lay their eggs on the beaches here. It's one of the most important leatherback turtle nesting grounds in the world. And the people who are taking me out the experts were talking about how sea level rises, endangering the nesting grounds, because the beaches are being washed away. You know, there's all these implications for this in a place like Trinidad that are both subtle and profound. And beyond just the fact that, you know, the big banking systems and banking buildings and other infrastructure in downtown are built on landfill and at risk,

### D

### Doug Parsons 1:21:25

you have a new book coming out, can you give us a preview,

# Jeff Goodell 1:21:28

I do have a new book. So the new book is called The heat will kill you first life and death on a scorched planet. And it basically is trying to do for extreme heat, what the water will come did with sea level rise, which is to think about it on a global scale in all of its implications. We think about, you know, hot days and heat. And you know, we all kind of know that it's uncomfortable. And it's kind of a bummer if it gets too hot and all that. But I don't think anybody's really thought very deeply about what extreme heat really means. And the notion that basically all life, including us on this planet evolved in what scientists call a Goldilocks zone, which is a relatively narrow band of temperature range. And we do fine as long as we are in that temperature range. But once we move out of that range, it's big trouble. And not just big

trouble for for us, but for plants, for trees for crops for all living things. And the book tries to really look at that. And in a way, it's interesting contrast to my book about sea level rise, because sea level rise is really about, you know, I mean, some people would say it's about real estate, it's about infrastructure. It's about how we live on the coasts, but no one's going to die of sea level rise, you don't stand on the beach and have the water rise so fast, that you know, you drowned, obviously, you can impact storm surge and things like that, but the heat will kill you, and it will kill you fast. And it's really a story about the extreme risks we run in these extreme heat waves that are becoming more and more part of our lives. The heatwave in British Columbia in the Pacific Northwest in 2021 is a great example. Nobody thought about that as a place where there were going to be heat waves The idea there was 122 degrees in British Columbia and you had a town that more or less spontaneously combusted, you know that was not on anybody's bingo cards for the our climate future. And so I look at things like that heat waves in the ocean heat waves impacts on crops on food security, and just you know, I go into some detail about how he kills him. What does he do to a human body? And it's to me a pretty scary prospect.

# Doug Parsons 1:23:32

All right, hopefully I'm gonna get you on the podcast when the book comes out. Thanks, Jeff, for coming on the podcast. Thanks for having me. Hey adapters, we're back and I'm with his worship Mayor Joel Martinez.

## J

## Joel Martinez 1:23:46

Yes, I'm Joel Martinez, the mayor of the capital city of Trinidad and Tobago. It's the city of Port of Spain. And it's a beautiful day in the city of Port of Spain. And it's a beautiful country as a matter of fact.



## Doug Parsons 1:23:59

Okay, so we're here at this keeping history but water conference. Why are you here?



#### Joel Martinez 1:24:03

Well, I have been invited to get bring greetings, because once you have an event in the city of Port of Spain, and it's one of this type of magnitude, what they do is they tend to invite the mayor to bring greetings. And because I have traveled it will and have been to many of these type of events where you have climate change, because that seems to be the in thing now where everyone wants to be able to deal with it. Because the development banks countries are starting to see the effects of it, and how it has impacted on human life and living and so on. And I think they want to show that the mayor brings some form of relevance to these meetings.



#### Doug Parsons 1:24:52

Okay, so as a mayor, you have to worry about things like roads and law enforcement. How does

#### Joel Martinez 1:24:59

Well, we live on an island. And first of all and surrounded by water. And climate change seems to be the impact on especially in the Caribbean islands, hurricanes. And we had one of our strongest earthquakes in many, many, many years, just a few years ago, but we sort of in the hurricane belt, but a little bit off of it, because we are the last island in the Caribbean, just off of South America. So what happens is, we do get the impact of heavy rains, and a lot of winds and so on. And we have had one or two hurricanes that have impacted on us. But we are starting to see now that this climate change, the Hurricanes are coming closer and closer and closer to the mainland of South America. And then because we are on earthquake footing, you'll find that we starting to get some more and more traumas. As far as I see it, we should be very impactful, you know, and we have to be concerned about climate change, what is happening to is that the days are getting hotter, the nights are getting colder. So you're seeing a change of temperature, which could maybe impact not just the humans, but the ecosystems. And it may impact on the way in which we do things into the future.

# D

## Doug Parsons 1:26:16

Youth Engagement is an important thing for you How can youth be play a role in climate change,

# Joel Martinez 1:26:22

one of the things that I found that you really need to be able to drive and make it as impactful as ever, is that you have to include the young people, the youth has a sort of dynamic thinking because they're still young, and they are aggressive in their thinking, the different from the older generations, who would have grown up without any of these issues. And their their whole thinking on change. Sometimes it's a little more lethargic than the young people, they're a lot more aggressive as, as I would put it. And to me, if you really want to make a change, you have to help them to see that the future is impacted. And it could already impact on how the type of living into the future will be affected, I can see that we really need to engage the youth in a more meaningful way and get them to be a part of the process.

## Doug Parsons 1:27:19

I've never been able to ask a mayor this but I'm gonna put you on the spot. What makes Port of Spain so special

## J

# Joel Martinez 1:27:25

for the spin is city that is a mixture of historic and modern architecture we have as the EPIC Center of Carnival. It's a space that when you hear of having a good time, and enjoyment and happiness, you have that thinking of Carnival, which happens in Port of Spain, Sao Paulo spin is

very uniquely charmed in that way in in that particular way. I am quite happy to be the mayor of the capital city at this time. It will not be the mayor forever. But I'm trying to do as much as I can do not just locally, but regionally and internationally that one of the things I wanted to mention to you though, was the fact that we've just recently gotten a designation for you from the US school network which is we are now a city of music. As you would know really the city that produced the steelpan which is the only percussion instrument and that was invented recently you evidently 20th century. We are known for Carnival we are known for our Calypso our Soca, rap, Soca, chutney, Soca and all the different types of genres of music that are now taking place in the earth and around the world. So it's a it's a real unique type of how we celebrate because I call it happy music. Because our music is not one that makes you sad or feeling a sense of melancholy. But it's a music that helps you to make you feel energized and energetic, nice sunshine kind of island, kind of music.

# Doug Parsons 1:29:03

Thanks for joining the podcast.

# Joel Martinez 1:29:05

Thank you very much for having me. It is a pleasure talking to you, Doug.

# Doug Parsons 1:29:14

Hey, adapters, we're back. And I'm with Kara Roopsingh. Hey, Kara R, it's great to talk to you. We are having this conversation after the conference because I wanted to do a wrap up with you and Lisa Craig. And so we're going to talk about some of the highlights from the conference. But I also want to get your thoughts on there were actual outcomes. But first off, just so people know who you are, what's your role there at the National Trust?

# К

#### Kara Roopsingh 1:29:35

So I'm the senior Heritage Preservation and research officer at the National Trust to Trinidad Tobago. That's just a very long title, meaning I handle a lot of the legal listing and protection of heritage sites just safeguarding heritage sites and protecting them under the National Trust Act and a lot of the research work that my department does as well as managing this resilient heritage project right now. That's a two year grant project. funded by the US and Bositis Fund for Cultural Preservation.

# Doug Parsons 1:30:03

And just to acknowledge if you've folks hear some birds in the background Kara is actually issues in Trinidad right now. And so those are birds. And she's, it's I'm challenging my listeners, if you know what birds they are, contact me and let me know. And we'll see if we can identify the species. All right, let's move on. Kara, let's talk about your role in organizing the conference. So we're now after the conference, but tell us a little about that.

#### Kara Roopsingh 1:30:23

Yeah. So this was a big output of the grant one of this major engagement strategies so that we can get an international audience chatting with our local stakeholders and our regional stakeholders, especially and bringing them together to chat about this topic of climate change on heritage, we reached out to a lot of our regional partners. First, of course, our local partners, a lot of national trust within the Caribbean region, we made sure it was a hybrid event, we wanted to get that online engagement for those who weren't able to fly into Trinidad and Tobago, and the recordings have made sure to put them online for continuous engagement so that we can have people comments and send us their insights. And we want to have continuous feedback and engagement throughout this project. And then we have our cost. The youth are very special to us in this project. So we made sure to invite them to the conference and to participate as well.

#### Doug Parsons 1:31:14

Yes. And you're also you're doing this podcast, too. So there's many different platforms that you guys are getting the word out, which I think is fantastic. All right. I want to talk a little bit just to ground some more, you know, we've heard from different folks talking about these issues. But basically, what are some of the challenges faced by the Heritage properties studying this grant, and how's your project addressing those challenges?

## Kara Roopsingh 1:31:33

There's different challenges, I'll say, so the sites that are downtown Porter's been there in an urban landscape and urban environments, they often get, you know, lumped in with regular infrastructure in terms of how they're dealt with. But we know that historic properties built out of lime water or stone require specialist care and attention, this project is helping raise awareness of some of the impacts that these sites don't on put a spin are going to face in terms of a click changing climate. And then we have Nelson Island, which is an island just off the coast of shag aramas. And that island is a unique historic sites out in the ocean open to a lot of different elements to what's happening downtown Port of Spain, and then we're trying to use that 3d laser scanning to be able to model and plan and understand well, what is gonna happen to the sides and 50 years, 100 years as it's impacted by climate change.

## Doug Parsons 1:32:29

Okay, so you alluded to it, there's the scanning there, can you tell probably not gonna be sure all of them, but what were some of these technological methods that helped you assess the condition and vulnerabilities of these sites? Yeah, so

#### Kara Roopsingh 1:32:39

one of the things we use was 3d terrestrial laser scanning. That's the University of Florida team. From the historic preservation program, they use terrestrial laser scanners to get a streetscape



view of the downtown what has been sites and they actually scan the entire Nelson Island site, including all of the buildings and relics, they also use drone footage to capture some of the areas that the laser scanner couldn't see or pick up. And then they also use photogrammetry, to capture some of those smaller detailed architectural features. And all of that combined will be put into climate change modeling so that we can understand how to better plan and mitigate some of the effects that will happen on these sites

# Doug Parsons 1:33:18

you just led me here is you now have this information. So what kind of strategies were you planning to do to increase the resilience of these heritage properties?

## Kara Roopsingh 1:33:26

That's where the phase we're at right now writing up and creating these adaptation plans. Because what of the workshop at the end of the conference actually gave us a lot of that public engagement and opinion getting people's ideas of what do they think is not working? What needs to be improved? What are some of the requirements that are things that we should be looking at in terms of climate change inherited, so we're going to put all of that together as a team. And that was when the final report will come out at the end of December?

## Doug Parsons 1:33:54

So you just prompted me there. I was going to ask you a bit about the workshop. So there was the conference, but then you had a one day workshop? Can you give us a little bit more background, not everyone who was at the conference, attended the workshop, tell us a little bit about that process.

#### K

#### Kara Roopsingh 1:34:05

So the workshop was half day workshop at the end of the conference, which was for locals only. So the idea was to tap into that local resource and say, Okay, now that you've had these three days of discussions of presentations of we've sharing, some of the results are scanning and vulnerability assessments from the project. After you've digested all of that, let's have a discussion and see what ideas we can share amongst each other to see what we could come up with to help everyone was broken up into breakout sessions, and they were able to come up with strategies and areas that they think that we need to focus on for our reports,

#### D

#### Doug Parsons 1:34:44

can you give us a little bit of a preview? Obviously, you can't give us all the workshop outcomes, but just some of the things that were generated must have been because there was three days of the actual conference, and that probably really helped inform a lot of those conversations. Right.

#### Kara Roopsingh 1:34:56

It did inform a lot of the conversations. I think one of the main focuses for the I would say change would be governance and policy changes. So a lot of people wanted a data sharing pathway across public and private sectors. So for example, a geographic information systems or a spatial data infrastructure that was accessible to both government institutions, as well as a private citizen, so that they can be able to understand the landscape or make decisions. By having that spatial data available to them, you know, crip, they need to create a disaster plan and things like that, it's not as easy to accessible right now. And then they believe that education and you know, raising awareness about resilience and sustainable building practices, um, so passing building codes, and having legislation and codes for building guidelines, and construction guidelines, all of those things would help mitigate disasters as well. So that's just some of the examples.

## Doug Parsons 1:35:55

Okay, so do you see an opportunity for your National Trust to share what you have learned through this whole process with some of the other island nations in the Caribbean?

## Kara Roopsingh 1:36:02

Oh, absolutely. I think we have similar problems within the region, you know, a lack of maintenance of some of these historic sites, a lot of our sites are coastal in nature, quite a bit of the islands have to deal with hurricanes and other natural disasters constantly, every season. So this is a good opportunity to share this methodology. And he shares what's working with this methodology with other islands, so that they can also come up with their strategies and adaptation plans based on their local that's the best part about I'll say that look, laser scanning is it gets into that localized on the ground data with that high level of accuracy, so that you can plan better for these disasters.

#### D

#### Doug Parsons 1:36:46

So you were able to get some of the local leaders there in Trinidad, Tobago to actually attend the conference. How do you think this conference benefited? What they want to do? Did you hear some feedback? Did you feel like there was this learning process from the actual leaders there in the field? Yeah. So

## Kara Roopsingh 1:36:59

I think our ministry, the Ministry of Planning, and development has been super supportive throughout this project. And this process, I think we've done a really this conference especially, has done a really good job of raising awareness of letting them know that heritage and cultural heritage has an important role to play in this fight against climate change. Currently, our ministry I know is going through the process of editing and doing consultations on the national



climate change policy. So we're hoping that with this perfect timing of this project, we can say, hey, cultural heritage needs to be on there, it needs to be noted in a specific way. And these reports will be able to give you that data to do so.

# Doug Parsons 1:37:41

My listeners have already heard from Margaret McDowell, she's the chair there at the National Trust. And we had talked at the conference. And you and I are talking now after the conference. And she was very excited. I asked her what's next? How does this inform what you're going to do with your team there? And so are you hearing a bit about that? Was there this Okay, now we've got this and there's just new energy to do the kind of work that you're doing on this project.



#### Kara Roopsingh 1:38:00

There's a lot of new energy. Now there's a lot of traction. I know we've we're getting a lot of requests for consultations on different things. So I think this has started a really nice momentum. And I hope to keep it going because there's so many other vulnerable sites across Trinidad and Tobago, and I can't wait to chat with Tobago about it and see what we can do over there, as well as the rest of the Caribbean region. And I would encourage any other Caribbean country to reach out to us. We'd love to chat with you more how we can help.



#### Doug Parsons 1:38:30

All right, awesome message. All right, what's next for you specifically,



#### Kara Roopsingh 1:38:34

right now, our main focus is wrapping up some of the engagement. So our video of the entire project will come up soon by next month. So we're going to put that out there really excited to share the details of this project. And then the biggest thing for us for the rest of the year would be writing up these reports. So our vulnerability assessment reports, a conditions assessment reports, the conservation management frameworks, and of course, the resilience and adaptation plans that we will hope to pass on to all of the stakeholders who have participated and shared information and helped and we're going to make it very accessible, make sure it's on our websites for anyone to be able to access and read and share the information as well.

#### Doug Parsons 1:39:17

Kara, thank you for coming on and sharing your message. And I also want to acknowledge when I first got there, I screwed up. I was supposed to go on the Nelson Island Tour, which I ultimately was able to do. But as backup you took me around to parts of the island and we got to see some really cool areas, the bamboo forest and I want to thank you for being such a great presence at the conference and for kind of looking out for some of us there on the margins of the whole thing.



#### Kara Roopsingh 1:39:39

Oh, you're absolutely welcome. It was my pleasure. I love sharing your knowledge with people. We are such a wonderful, unique place and I'm so glad you got to experience it



#### Doug Parsons 1:39:54

Hey, adapters we're closing off this conference by catching up with Lisa Craig and this is being recorded. after the conference, we've had a chance to digest what occurred there. Hey, Lisa, welcome back. Hey, thanks, Doug. It

Lisa Craig 1:40:06

was a great time.

## Doug Parsons 1:40:07

Yeah, it was a fantastic time, my first time in Trinidad, Tobago, and thank you for bringing me down and covering it with the podcast. Alright, I've got some questions for you as a wrap up from a 30,000 foot view, how did you think it went?

#### Lisa Craig 1:40:20

I think it was terrific. I learned so much. I met so many people that are engaged in this topic. And I think the interesting thing was all of the individuals that came from other Caribbean nations, we just had a great time talking about opportunities to work together in the future. And we got to hear their stories, we got to hear things about volcanoes, the impact of climate change and volcano eruptions and what that means to Island communities. We got to hear about archaeology programs and education in secondary schools, and the importance of training the new generation, we also got to hear a lot of best practices that are in place in islands all over the Caribbean. But beyond Martin spoke quite a bit about what the State Department is doing to help support other communities who are trying to protect and prepare better for climate change, and their cultural heritage sites. So great opportunity. And of course, it was was wonderful to enjoy the atmosphere, the environment of the Trinidad and people very welcoming and very engaged in this topics. So rewarding, beneficial and important that we were there to share information with them.

#### Doug Parsons 1:41:40

So you talked about some of the highlights and some of the things that you learned. Did you notice a difference with the work that you do on adaptation of heritage sites in the US versus the Caribbean? Anything stand out?



#### Lisa Craig 1:41:49

Absolutely. And I knew a little bit about this before we got there. Hence why we had brought David Guggenheim in, for example, to talk about natural heritage, there is an interrelationship between the environment and historic places, the importance of going at midnight and seeing the sea turtles out there laying eggs that is as important a cultural experience as what you might find in one of the museums or cultural institutions there, the tie between natural heritage as a culturally significant component of the Trinidad in history was an important my opening experience for me. And of course, the built environment was very much at play as well, but in the sense of somewhere like Nelson Island, which it was a very moving experience to a very isolating experience to understand the immigrant community to understand those who were imprisoned there during the Civil Rights Movement. And to know that both the built environment and that rock out there really were interrelated. In terms of the value and the story they told about Trinidad and culture. Well, I was

## Doug Parsons 1:43:04

able to do a couple field trips, and you and I got to go on that Nelson Island trip together, we had a very small group, we had a tour guide who worked there for the National Trust. And it was pretty amazing. I had no clue about the history of the islands. And I thought it was really interesting, the Indian migration that happened in the middle of the 1800s. And it's this tiny little island that experienced that much. And what really stood out to me is it was actually making history, even relatively recently, the Black Power movement of the late 60s, early 70s. They had that movement in Trinidad and Tobago to we think of that just being a US thing. And we got to go in and where people were kept in jails. And just Yeah, it was fascinating that it was still in I'm not weighing in one way or the other of what really was happening there. But it was just it was being used in making history. I thought that was really fascinating.

#### Lisa Craig 1:43:53

Yeah, that story of immigration in isolation is something I know that they're going to build on. And and I think that's part of what we do in terms of our climate adaptation planning. I constantly look at opportunities for increasing public awareness, not just about the value of heritage history, historic sites, but the impact of climate change on those resources. And that's why Nelson Island is a perfect example of how we need to find ways to adapt that island so that that story can continue to be told in a context of its environment and its buildings, its properties.

#### Doug Parsons 1:44:31

Just as an aside, I thought really cool is we took a boat out there and was still relatively close to the mainland. You can see Venezuela, Tobago, like there's a peninsula that comes out and you're just looking over there, like maybe 810 miles away. It's like that South America so that was really cool. All right for you what kind of follow up activities do you have planned after this conference? And you know, I know the National Trust down there. They are very excited. They're looking forward to take the information that they glean. What about you and how do you see You're so fitting in all this?

# Lisa Craig 1:45:01

Well, we are in the process of completing the resilience plan to give them some very specific adaptation approaches that really were developed by their community. And it's really important to make sure that people have the capacity. So the National Trust, what is their capacity to implement some of these changes these adaptation strategies, a lot of young people were involved in our last workshop. So a lot of it will focus on public awareness, education, programming, as well as some simple things that property owners can do to create greater resilience to basically reduce the risk of flooding and sea level rise. But I think what's even more important than that Kara, who we really was our conference host there, she has gone off and spoken at a number of other workshops and conferences since then, about her experience. And she's really an ambassador on this topic of climate change and its impact on island nations. So we can look to future young leaders like that to spread the word. But in the same time, I'm also talking with Martin and with Brent Fortenberry about doing some more work in some other Caribbean islands, as well as Hawaii, there's a really strong interest in some partners in Hawaii, particularly the Department of Defense, which is involved with, obviously, climate change adaptation, and needs to for the security for the national security to address that issue. I think that that's going to be an opportunity, perhaps next year working with the Marshalese Marshall Islands are significantly impacted by climate change. So we may just, you know, take this show on the road, so to speak, across over the United States again, and find ourselves in Hawaii in 2024, doing something fairly similar. And that needs

## Doug Parsons 1:46:52

to be captured in podcast if. Okay, just to clarify a why that you're having those conversations. But tell us a bit about would this be okay, keeping history of of water is almost this franchise? Would you use that format in a place like why what's the future of keeping history above water?

# Lisa Craig 1:47:11

I think we're gonna continue to build on what is really some strong elements of this conference. It's not one of those things where you go to a conference, you have a plenary, you break out in four or five different sessions. It's really everyone in a room for two days hearing some fascinating stories with their big picture concerns about this changing climate and its impact on on the world or whether there are simple stories being told by individuals who are property owners who were impacted by a major disaster that was climate related. What do we learn from those stories? And then how can we turn that into just best practices, case studies, examples that can be adopted by other communities in some simple ways, or some more complex ways, bringing all of these experts together after a while they really can create opportunities and synergies to work to combat this issue in a way that is proactive is happening today. You know, we're not just wringing our hands saying, well, we me the climate is changing, we're coming with some solutions on how to adapt to these future conditions, I think we're going to see when we're in Hawaii, a gathering again, of Pacific island nations, to learn from each other to look at what indigenous communities have done over decades or hundreds of

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years, in essence, bringing back those traditional practices, and then helping them understand that we are here to assist them as they go forward and to share our network of individuals and experts in this arena.

# Doug Parsons 1:48:53

Okay, so let's just make it clear to my listeners, though, so you've been involved with these keeping history of waters and they do have their own origin. But if there's a community out there that thinks this is a great model for some of the work that they'd like to get involved in, or they're just starting, they can reach out and maybe even be potential hosts for these efforts. Right?



#### Lisa Craig 1:49:10

Absolutely. You know, our original founders of this format, the Newport restoration Foundation has been very welcoming of any organization or community that wants to showcase good works that they have done in climate resilience, climate adaptation, or that have real need bringing experts to their community and sharing information. But also, we spent some time meeting with them and giving them ideas about how to move forward to create greater resilience in their communities. So absolutely an opportunity for anyone who wants to talk more about how to become much more resilient and keep that history above water.

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## Doug Parsons 1:49:50

I'm gonna have a bunch of material in my show notes for this episode and the web page. But if people want to get in touch with you or learn more about what you're doing, what should they do?



#### Lisa Craig 1:49:59

Well, they can go Go to our website, which you'll have in your show notes. I'm sure the correct group partners.com Or they can contact me directly at L. Craig group@gmail.com.



#### Doug Parsons 1:50:12

Excellent. All right, Lisa, thanks for partnering with America Adapts and thanks for being on the podcast.



#### Lisa Craig 1:50:17

Thank you, Doug. Appreciate it.

#### Doug Parsons 1:50:25

Hey, adapters, that is a wrap. But before we go, I wanted to share some final thoughts. This was my first time in Trinidad Tobago. And let me tell you, it's a fascinating country. The history of immigration onto the island is truly remarkable. And it's led to a rich and diverse society. I thought the US was a melting pot. But Trinidad and Tobago takes it to a whole new level. The people I met were incredibly honest about the culture both good and bad. But despite any flaws, they were proud of how well everyone gets along. I had such a great time. I want to give a big shout out to Lisa Craig and the Craig group responds to me to cover the keeping history above water conference, Lisa is doing some amazing work with adaptation planning and local communities and it's always a treat to work with her. I also need to thank the fantastic team at the National Trust in Trinidad for helping me out with interviews and photos and making sure I had everything I needed and a special thanks to Kara for all her efforts in this. If you're interested in learning more about any of the guests, check out my extensive show notes. And if you want to host a keeping history above water conference in your community like Lisa mentioned, feel free to contact her or take a look at the show notes for more information. So as you heard I partnered with the Craig group in this episode to tell their adaptation story. Are you struggling to effectively communicate your climate adaptation story to the right audience? Are you finding that traditional methods such as webinars and white papers are not resonating with people and promoting your work effectively? If so, consider telling your story through a podcast sponsoring an episode of America dabs is a great way to focus on the work you're doing and share it with climate professionals from around the world. I personally go on location record sponsored podcasts which allows for a diverse range of guests to participate you work with me to identify experts who can represent the amazing work you're doing and past partners have included Natural Resources Defense Council, University of Pennsylvania Wharton, World Wildlife Fund, UCLA, Harvard and various corporate clients. By sharing your story with my listeners who are some of the most influential people in the adaptation space, you'll have the opportunity to reach a wider audience. Additionally, podcasts have a long shelf life making them a valuable addition to your communication strategy. There is no better way to get your message about adaptation out to some of the most active and influential professionals in the world. Definitely check it out in my show notes. Also, if you're interested in having me keynote, speak at your conference or corporate event. Please reach out folks, I speak a lot and you're going to enjoy it. I've been doing keynote presentations and they're a lot of fun as your stories from the podcast and my own experiences in adaptation. I will talk about adaptation ways that it will motivate and inspire your audience you can contact me at the website America daps.org Okay guys, before we wrap this up, I love hearing from you. I mean it just say hi, if you have an idea for a guest let me know if you have feedback on an episode. Let me know it is the highlight of my day when I get an email from someone listening to the podcast. I'm in America. daps@gmail.com Send me an email. All right, stick around for the bonus material, a short interview with Mr. Carlos who led my field trip to the mountains of Trinidad and also a short story he shared with us you are going to love Mr. Charles storytelling gifts. Okay, adapters Keep up the great work. I'll see you next time. Hey, adapters, I'm with

#### M

### Mr. Carlos 1:53:23

Cornelius Willis and Carlos. And I'm a tour guide at what you call Trinidad Tobago. And we do tours especially in that area of Paramon. We are in permanent at this point in time, so I'm using the payment platform for today.



#### Doug Parsons 1:53:38

Okay, but we're supposed to call you Mr. Carlos right?

#### Mr. Carlos 1:53:41

Yes, it was gonna be Mr. Carlos . Yes. Yeah, to call me Mr. Cornelius Felicien but Carlos as a nickname or what you call aka are better known as. Okay, can you

#### Doug Parsons 1:53:51

briefly describe what are we seeing today? What is this tour about seeing Paramon?

#### Mr. Carlos 1:53:57

Okay, so you are invited here to Parliament to come to co2. And we have about five different verbs or five different stages of our tour, we use what you call history. So you're getting the feel of where we came from, into the oil to the modern. You're also come in here and you will be seeing what you call agriculture, which we are going to see now. You're also getting a panoramic view of the Caribbean seas, which will also give you what you call it diversity of, of the landscape and also geography wise, then also to your learning one or two of the language, which is our language, the main language is called creole or better known as patois, but we also speak English.

#### Doug Parsons 1:54:33

Can you give us a few expressions, we went down and you're explaining patois and you're talking about how maybe a Jamaican person might say something and there's his French background. Just give us some of those examples, maybe some colorful language,

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#### Mr. Carlos 1:54:44

okay, so like say for instance, you would patois it's a breakdown of another language. So, when you go to Jamaica, it will be a big English. So their English will be saying like, what, what there was a war and things like that or let us go there. There we go. But in Trinidad had our breakdown of the patois is from the French. So it's like missing also say gaudy it means look if I see caffine it means come if I say we saw say earlier it means go. So basically our patois is of the French so if I say oh sassy Gotti Bell Plus Local beautiful place diversity Guca de la Muela look the ocean or look this ocean MD disease. So patois is a build on from friends. So if I say things like, someone telling me farewell, I could say Bonwit sorry, at night, good night or say seeing them of war. So it means the same as French.



#### Doug Parsons 1:55:40

So you deal with a lot of tourists who come to the island what's one of the most surprising



## Mr. Carlos 1:55:46

Well, I think the one of the most surprising thing they learn from if they do come into a village like parliament, are the CLEAN CLEAR atmosphere and the panoramic views that we have. Sometimes some of them cannot believe as much as we are tropical or cool we at times like right now the time of the day is after 12 And you could actually feel the coolness. So they're actually surprises and things like that and on top of the road where we are going to go now where we will be like driving on the back of a snake like and for you. For persons it may be kind of like intimidating like scary but for us, it's part of our life. So they like really like whoa you're really living in heaven because we are very very, very high. Where we are as we speak.

#### Doug Parsons 1:56:29

Okay, two things. What's your favorite spot on the island and what's your favorite food?

#### Mr. Carlos 1:56:35

My favorite spot is where I'm standing right now at this point in time it's called Paramon better known as love visually look out. One of my favorite food is normally my favorite food is called pillow and I will eat pillow over any other but I will branch off to my breakfast which is a good coconut bake or roast big and bold oil or better known as soul fish.

## Doug Parsons 1:56:59

Okay and you said something very special about the spot we're on we have this ridiculously beautiful view and you said people down in the city talk about how special this area is. What did you say that happens here?

#### Mr. Carlos 1:57:09

Well I would say definitely because sometimes if you are very relaxed person or you're a person of have in deep thoughts, here is a place will be very lovely for you because you will come here by just sitting here you feel a difference in your paws feeling close, deep soul searching things that you may want to do that you cannot do in the city less noisy places so tranquil, then you get to hear birds parrots, even see in the little mud. So here brings back to you to grounded to get you like whoa, we are not alone. We exist in with others and it is so magnificent. So these are the kinds of things that will capture persons who want that will or the persons who don't want that world they will be in that world this will don't matter to them but if you are a person of nature, someone who like scenery someone who wants to relax wants to go into as I use it with deep thoughts you will prefer to come here because I have seen many persons of the different religions such as Muslim coming here to do their prayers in the evening when the sun is going to bed.



## Doug Parsons 1:58:16

Is there ever a situation where you're not talking to people?

## Mr. Carlos 1:58:20

No, I always speak to people because I think I think I have a gift when it comes to speaking ideas like speaking one of the things I noticed lately is that I speak a little too much because I run out of time. But I'm grateful for it anyway.

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# Doug Parsons 1:58:34

Now we don't think so. You've been a wonderful tour guide has been fantastic and thanks for being on the podcast.

#### Mr. Carlos 1:58:39

Thank you so much. Thank you very much and I will say it in my local twang. I will say to my local one to you so I say merci appeal merci appeal Missy. Thank you very much for coming donkey long time ago everybody know what a donkey was that donkey still my favorite animal donkeys very very very extremely intelligent is just we as people very very means Massa coming home a day in january MONTH on his arm has a little piglet walking and depicted on his on January mountain eaten donkey or slap every time a little group come on Donkey Come on. Come on down to come on. Come on donkey, come on and donkey walking in front and little piglet on his son watching that happening. So one mastery two, three months later, little pig could walk and he could talk so piggy went up by donkey Ethernet grass and said donkey donkey. You remember me? You will hear when I come home you only carry my food while you carry food for me. Are you eating grass donkey? Donkey was like pee. Take time SantaCon Loki whether it is grass, three months later, the comeback is July month Biggie we could talk no big deal Going after donkey no donkey donkey Why are you always eating grass? What you bring your food for me knock on chicken say you stupid you always bring your food for me and he allowed to eat but you eaten acetyl grass don't kiss it take time pee again one of October big get bigger as using my terminology he get more bull face so mr pig woke up to Donkey donkey donkey such a schmuck know what's wrong with you everybody on the pharmacy use a jacket they say use I realize because you're bringing food for me to eat you bring into the masa you bring in food to cook chicken everybody doc What do you eat and I said that grass donkey see take time we any month of the month of the bars soon went back December around the 22nd he come up now bigger, more bold face you walk up to Donkey snotted donkey Look at me I'm here only level man's master giving me what I want on my own pool all the animals they use the biggest us on the farm sector grass grass don't get along well soon. We only want a Santa PE Eagle back three days later donkey hablen we must apologize for the pig dead donkeys in more more more more. Donkey watch what epic did fought epic make ham and donkey silly TV grow quicker

