[SQUEAKING] [RUSTLING] [CLICKING]

**GEMMA HOLT:** So hi, everyone. Today I'm new talking about the ongoing efforts to modernize the Columbia River Treaty, sort of the agenda. The Columbia River Treaty was originally signed in 1961, so I'm going to go through the historical context that led to that.

Signature-- talk about the 1961 treaty negotiations and outcomes. And then I'm also going to talk about the ongoing case for modernization and the ongoing treaty negotiation process. So covering a lot of time periods here.

So a little bit of a geographical overview. The Columbia River Basin is over 250,000 square miles, which is larger than the entire area of France. The Basin includes more than half of Washington and Oregon, almost all of Idaho, and parts of Montana, Nevada, Utah, and Wyoming.

And approximately 15% of the Basin is in the Canadian province of British Columbia, where the Columbia River, which you can see here on this map in purple, originates. And then in southeastern Washington, the Columbia River meets the Snake River, and together that feeds into the Pacific Ocean.

So the United States and Canada have a long history of bilateral cooperation. They share the longest international border between two countries, and their bilateral negotiations date back for centuries. As far as water diplomacy goes, the origin of this is the 1909 Boundary Waters Treaty, which was signed to come up with an approach for preventing and resolving disputes over the use of shared waters.

It established an international joint commission to help the two countries carry out its provisions. And at the time, disputes over water, most notably on the Niagara River on the East Coast, were already creating tension along the border. So the treaty provided this framework to deal with these disputes. It held its first meeting in 1912, and it has worked over the last century plus to resolve more than 100 matters raised by the two federal governments.

So the Columbia River Treaty more specifically came about during this era of hydropower expansion in the United States and Canada, which is symbolized in the 1930s with the construction of the Grand Coulee Dam in Washington. And during about a 20-year period, more than a dozen large dams were built in the Columbia River Basin-- mostly for hydroelectric power purposes, but they also benefited flood control, navigation, and other irrigation projects.

The construction of these dams had and continues to have a negative impact on the ecosystems of the Basin. For example, the completion of the Grand Coulee Dam eliminated salmon runs from the mainstream Columbia River and its tributaries in British Columbia. So the specific impetus for the Columbia River treaty was a major flood in 1948. The river was abnormally high due to deep snowfall and large rainstorms. And it breached a dike in Vanport, Oregon, which is an industrial suburb outside of Portland, and the town was completely submerged. 18,000 residents were displaced, 51 people were killed, and the estimated property damage was over \$100 million. So you can see here on the right a picture of the town right after the flood.

So the original treaty emerged in response to these two, one trend of hydropower development and then the specific flood control needs that were raised by the Vanport flood. So agreeing to agree. In 1944, Canada and the US had requested that the IJC determine whether a greater use than is now being made of the waters of the Columbia River System would be feasible and advantageous. And then four years later, after the Vanport flood, detailed studies began.

And what followed was 11 years of discussions and analysis, two requests by the US for approval of the Libby Dam in Montana, which is pictured behind me, my virtual background. Two proposals by Columbia River companies to build Canadian dams, committee hearings in the US Senate and the Canadian Parliament, and a gradual acceptance by the US of the idea of sharing downstream US hydroelectric benefits. So 11 years of negotiations and then another round of formal negotiations began in February of 1960.

And then ultimately the Columbia River treaty is signed by President Eisenhower and Prime Minister Diefenbaker on January 17, 1961. The US Senate approved it almost immediately, but ratification took an additional three years in Canada, largely due to British Columbia needing to negotiate with the Canadian federal government to clarify issues of authority and responsibility. So that was the original round of negotiation processes.

And the treaty as it emerged has two primary focuses-- hydroelectric power and flood control. The terms of the treaty specified that Canada would provide about 15 million acre feet of storage usable for improving the flow of the Columbia River. This is really for flood control purposes to minimize downstream flood damages in both the US and Canada.

And as compensation, the US made three lump sum payments totaling \$64.4 million to Canada when the dams were completed, and that amount was based on an estimate of half of the present value of future US flood damages prevented. So the operation of the Columbia River Treaty storage creates hydropower benefits in both countries, and the CRT requires that the downstream power benefits in the US due to the operation of the Canadian storage be shared equally between the two countries.

This is known as the Canadian entitlement. And under the terms of the treaty, Canada can opt to sell the entitlement back to buyers in the US. And actually to pay for construction of the dams, British Columbia sold the Canadian entitlement to a consortium of utilities in the US for 30 years beginning in 1964.

So the treaty really is premised on this idea of mutual gains to both countries, both in terms of flood control and hydroelectricity. However, there were also losses created. Most notably the treaty made no explicit provision for other values such as water flow benefits for salmon and steelhead, continuing to exacerbate these ecosystem problems created by this era of hydropower expansion.

So these are the three. Here you can see a map of all of the dams in the system. The three dams in Canada up here. Can you see my mouse?

## SUSSKIND:

**GEMMA HOLT:** In purple and the Libby Dam in Montana. So those were the four dams that were built as a result of the Columbia River Treaty. But the consequences of the treaty affect the entire hydroelectric power generation across the entire basin. So it's very involved, even though there are only three dams actually generated as a result of the treaty.

So the treaty has been widely regarded as an example of successful cooperation and successful transboundary negotiations really built on this foundation of mutual gains. In 2011, when the renegotiation process began, the British Columbia government came out with a statement saying that the Columbia River is known throughout the world as one of the most successful models of a transboundary water treaty. Other countries see the agreement as a benchmark on cooperation to create and share benefits.

So I thought that was an interesting statement. And while the treaty did authorize this equal sharing of additional hydropower, results from the additional water storage, and coordinated water releases, there were also--negative impacts of the dams weren't necessarily equally shared by the two countries.

So the United States had fairly significant adverse impacts on fish and salmon habitat and some losses of land. But in Canada, as a result of the three dams that were constructed, there was major flooding and dislocation of entire communities. So Canada, although they were ultimately compensated for it, did have more significant negative impacts as a result of the treaties.

So the case for modernization-- the Columbia River Treaty has no expiration date, but 2024 is significant because it is the earliest that the terms of the treaty can be terminated. And so without renegotiation-- also in addition to the termination provision, without renegotiation, the flood control provisions will shift. So this presents an opportunity for the United States and Canada, as well as other stakeholders on both sides of the border, to reconsider the scope of the treaty and evaluate its effectiveness.

And I think within a water diplomacy framework, the fact that this renegotiation process is baked into the initial agreement is a strength. We can talk about whether the 60-year timeline is too long. But I think it is interesting that none of the original negotiators expected that the original agreement would last forever. But at the same time, this has also introduced some measure of conflict, I guess, because everyone wants the treaty to be updated in a way that reflects their priorities and values.

So thinking about modernization, which is the word being used by the negotiators, there's five main issues that have been raised during these ongoing conversations. This is not an exhaustive list-- lots of other things have been brought up as well, but I think it summarizes the most significant arguments, so I'm going to walk through each of these five.

So first as I mentioned, issue number one is that 2024, the current flood risk management provisions change to a less defined approach. And instead of Canada providing a set amount of flood control every year, it will be as-- on an on-call basis, and the US will pay on an annual basis based on how much flood risk has been assessed. So this is the core part of the original treaty, and it will expire unless measures are taken to renew or modify it. And in addition, it is the earliest date at which the treaty can be terminated, provided that either Canada or the United States provides 10 years written notice. No one has provided this, so the treaty will not be terminated in 2024. But it catalyzed this era of renegotiations beginning around 2011, 2012. That's issue one.

Issue number two is that since the original treaty negotiation process in the 1960s, stakeholders outside of the main negotiating parties have argued that the treaty neglects ecosystem needs. So the renegotiation process has opened the door for a variety of environmental advocates. And in particular, the dams built as a result of the treaty have altered the river's ecology and contributed to the decline of salmon fisheries.

So in a 1995 opinion on the impacts of the entire Columbia River power system on salmon, NOAA, the National Oceanographic Association, had set flow objectives at each of the Columbia River Basin dams. And in the last 20 years, the spring target has been missed roughly 27% of the time. So 27% of time, there's not adequate flow at these dams for salmon to pass.

And the initial study is about renegotiation, the US and Canadian entities didn't address any of these ecosystem needs. They only addressed updating the power and flood control agreements, although subsequent documents have addressed incorporating more ecosystem-based function requirements. So you can see here on this map on the right where there are salmon passages and where the dams have prevented any kind of fish migration. So almost everything north of the Canadian border, the salmon habitats has been completely destroyed.

And in particular groups that have been harmed by the original treaty and who have advocated consistently for considering salmon habitats are the Canadian First Nations and United States Native American tribes. And you can see here on the right, the historical land of the Yakama, Umatilla, Nez Perce, and Warm Springs tribes who have formed a coalition to advocate for incorporating ecosystem functions in the modernized treaty.

And that group came out with a statement recently that said that any modifications to the treaty must ensure full engagement and consent from tribes and First Nations and be in alignment with articulated Indigenous governance principles. So they're advocating essentially for expanding the formal negotiation team to include representatives from Native American tribes and First Nations.

Next, stakeholders responding to these needs on both sides have identified ecosystem functions as a key component of a modernized treaty. The US came out and said that there's an opportunity for inclusion of certain additional ecosystem operations, and the BC side, the British Columbia side said basically the exact same statement.

There is certainly a lack of clarity about what exactly ecosystem functions mean. It's become a buzzword within this negotiation process, and a lot of stakeholders trying to advocate for clarifying and determining what exactly are we thinking about when we're talking about ecosystem functions.

And then finally, the terms of the Canadian entitlement have led to conditions that disadvantage US electricity consumers. Because the Canadian Entitlement specifies that all power generated downstream would be split evenly among the United States and Canada, although the energy market has changed considerably since 1964. So the original economic assumptions were based on forecasts of declining downstream power, but these proved to be incorrect. And so the power sharing agreement has ultimately been more favorable to Canada than to the US, and the US entity has proposed rebalancing the power benefits to better reflect the actual value of the coordinated operations. However, some Northwest politicians believe that the terms of the treaty are beyond repair and introduced a bipartisan resolution in the United States House of Representatives calling for its termination. While this seems unlikely, it is another sticking point in the renegotiation process.

So formal negotiations opened on May 30 in 2018, and in June 2020, the 10th round of treaty negotiations occurred via web conference. And at the conclusion of those most recent conversations, the two sides released almost identical press statements, which I excerpted on this slide.

Due to the confidential nature of the cross-border negotiations, the specific details of Canada's initial proposal and of the US framework that they're referencing here have not been made public. And this lack of information has been really frustrating to the numerous stakeholders who regard modernizing the treaty as essential. So in 2018, a coalition of 31 nonprofit organizations sent a letter to the US entity advocating for, among other things, the expansion of the US negotiating team to include a broader range of stakeholders and greater transparency in the negotiation process.

So I'll talk a little bit about how the negotiations actually work. Each side is represented by an entity. The US entity is made up of the State Department, the Bonneville Power Administration, which covers multiple states in the Pacific Northwest, and then Northwest Division of the US Army Corps of Engineers. And the Canadian entity is represented by the Canadian Department of Foreign Affairs, Trade, and Development, and the BC Hydro Power Authority.

And so these are the formal negotiators. But in addition to those teams, there are numerous other stakeholders who are not formally involved in the negotiation process but have claims to the Basin. So these include, for example, states and their legislators, a large assortment of NGOs and other nonprofits, public utility districts, and tribes in both the United States and Canada.

So as far as thinking about what comes next and trying to imagine how this treaty might resolve, as I said, the negotiations are still very much in progress, and there's not a ton of information about how things have been evolving. That said, there seems to be a consensus emerging around how they can leverage the treaty to address ecosystem functions and other environmental concerns such as climate change.

This seems to be a priority for many of the non-formal stakeholders, and that has been reflected in statements made by the US and Canadian entities. There are lots of stakeholders who all have various views about how the treaty should be modernized, and there are even some stakeholders who believe that a formal treaty is unnecessary.

So I think there is a more-- I think it's unlikely that actually emerges as an option, but there's a question of whether the two sides could cooperate on flood control without a formal treaty or whether good treaties make good neighbors. So that's where we're at with this. Thank you all for listening.

DR. GAIN: Yeah, thank you, Gemma, for the excellent presentation. I think it's really nice the way that you have presented.
It's really wonderful. So now I would like to ask Mashroof and Flora to make the comments. And yeah, then we can discuss further.

AUDIENCE: So what would you think would be the biggest challenge to overcome from the government side?

**GEMMA HOLT:** I think it's this fundamental question of the treaty that they have has basically worked for 60 years, and people have been pretty happy with it on both sides. The US feels like they're overpaying for power, but that's been the main objection to the treaty as it currently stands. However, I think there is a fairly broad consensus that the treaty should be-- the scope of the treaty should be expanded to include all of these ecosystems-- not all of these ecosystem services, but certain ecosystem services relating to salmon fisheries and climate change.

And I think figuring out-- I think the biggest challenge for the government is figuring out to what extent are we going to transform this treaty that has basically worked for 60 years and broaden the scope of these negotiations, which I think is just a slippery slope. And is this treaty as-- even the right vehicle for having those conversations about transboundary environmental concerns? I don't know. I'm not sure I actually have an answer to that one. Yeah, I think that's the biggest challenge.

AUDIENCE: I'm also thinking something that since the climate changes in the-- climate change has very much been the issue, so help me understand this because I'm not that much familiar with the US government system. So I was thinking that, for example, the last government of the US, as far as my understanding goes, not really very supportive of the measures to be taken about the climate change and everything. And I know that in the US, there is spoiler system.

Once the government changes, almost a major portion of the administration changes. So with this shift of administration, do you think that will have a significant effect on making the future decisions on this treaty? And if yes, then how that might end up?

**GEMMA HOLT:** Yeah. I think I would venture yes. I think that even under the Trump administration, climate change still featured in this treaty because if, for example, there is less snowmelt or less snow accumulation because of a changing climate, that has serious impacts on US hydroelectric power generation and the economy of the Pacific Northwest-- I think 40% of Washington electricity is hydroelectric. So if there's less water, there's less power, and that's quite devastating to the Northwest economy.

> So to that extent, I think it impacts-- the potential impacts of climate change on this treaty had already been taken into consideration, whether under the current administration that might be expanded to include more comprehensive environmental values, it seems possible. I also think that this treaty is not a major foreign policy priority for either government. So it's skated under the radar a little bit.

And during some of the-- there were 10 rounds of negotiations, and then it was put on hold during the changing government. So I think whether it will be picked up with more focus on environmental concerns I think remains to be seen.

AUDIENCE: Actually both the questions came from my experience as a government officer. Because in our case, in the US or in most of the developed countries, generally what I see that although the governments change but the national policies and the national rules more or less remain the same. Very minor changes unless some drastic measures are taken. But in this part of the world, the government changes, the whole thing falls apart and you start from the beginning. So this is why I was trying to actually understand this thing so that I can actually design my presentation on paper from that perspective. Thank you very much. It was an amazing presentation, and I loved it.

- DR. GAIN: Thanks, Mashroof. Flora, do you have any feedback or concern for Gemma?
- AUDIENCE: Yeah, yeah, I really, really enjoyed this presentation. Great job. I appreciate your use of graphics. I think making a presentation is-- a good presentation is always not as easy as it seems. So yeah, overall, I think I learned a lot. It was very easy to follow.

I definitely had a couple of points that I would consider as further considerations, not really necessary but things that came to mind while I was listening to the presentation. So I'll run through, and you can either respond or not respond to each one. So the first one is, are there still opportunities for further hydropower expansion along the Columbia River? Because you mentioned that flooding is still a priority. But I know a lot of parts of the world hydropower expansion is really diminishing because we're just utilizing everything that we can.

- **GEMMA HOLT:** Yeah, so in my understanding, there are no opportunities for additional dam construction. There are opportunities for greater efficiency, like greater electric efficiency. Some dams have been identified as potential targets for removal, which would then catalyze additional needs on the existing dams for flood control measures. Yeah, those are the categories. Yeah.
- AUDIENCE: Yeah, and so then the next one-- so you talked about this a little bit, especially at the end, but I was wondering how climate change might exacerbate the water resources in the future. And I guess specifically, if certain stakeholders should be included. So you already mentioned a lot of stakeholders that are not being included, but it would be interesting if like ecologists, either like representing the two countries or some kind of neutral ecology representation to be included in the negotiations to really advocate for these environmental needs and not just the wants of the two countries, like economically or technologically.
- **GEMMA HOLT:** Yeah, that's a great question. I think one of the suggestions that has emerged in recent years is officially adding NOAA to the US entity team to have a better advocate for environmental impacts in that formal body. That is one of the things. Or other representatives from the US Department of the Interior that could be more of a voice for environmental concerns compared to the power administrations who have clear expertise on the hydroelectric side but aren't necessarily equipped to consider salmon habitats and things like that. So that's one of the strategies that has been proposed. Has not happened yet.
- AUDIENCE: Awesome. OK so the next thing is about-- so you did a good job of explaining the gains and losses from the treaty's point of view-- like which parties were suffering and which ones were really experiencing gain. But it'd be interesting to learn more about how this treaty was successful in terms of negotiations. So not just the effects of the treaty itself but also if people are saying that this is the model negotiation treaty.

I'm sure it's not just because of what the treaty was able to achieve, but also how the treaty was negotiated. I think that's one of the most interesting things about your presentation is that it basically refers to no animosity between the countries. It took a really, really long time, like decades of negotiations, but like almost nowhere in your presentation did you mention, well, they really got stuck on this one issue or they couldn't move forward because this one party was not cooperating. And I don't know, I think it would be interesting to understand like why is that. It must have something to do with the negotiations and then also probably the conditions of what's happening.

- **GEMMA HOLT:** Yeah, that's a great point. I have not really built that in, but I think that-- yeah, that's super helpful. I'd definitely do that.
- AUDIENCE: Yeah, I think an easy way is like looking at the Bruno Verdini's 12 steps and just checking off which ones seem to be fulfilled and then which ones don't. Because I imagine many are checked and then that's why it was effective. But yeah, no, it was really interesting.

I think it's a big shift from the case that I'm working on we're like basically the governments hate each other and that's why nothing is able to get forward. And I think it's just interesting to see how long the timeline is even if the governments don't hate each other.

**GEMMA HOLT:** Yeah, I was thinking I was thinking a lot about that after listening to Husnain's case last week. And the two-- they kind of arrived-- the US and Canada arrived at the negotiating table with this idea of mutual gains in mind. And the treaty emerged from that, and it wasn't-- it's not that the treaty is enabling an effective diplomatic relationship. The treaty is the result of an effective diplomatic relationship.

So how that differs and how that might be leveraged for a more comprehensive and forward-looking document going forward. Yeah, that's great. Thank you so much, Flora.

AUDIENCE: Yeah, no. I'm just trying to see-- OK, so the last thing that I had was-- I mean, you mentioned this as one of your open questions. But it's really interesting what the consequences for the different stakeholders would be if the treaty was terminated.

I think it seems like everyone's on the same page that this treaty's working, it's good. But then it's really weird that they're unable to extend the treaty. It seems like mainly just because people are dragging their feet. But , yeah it seems like in most cases, if the treaty went away, stakeholders would have some kind of loss. But I don't know.

**DR. GAIN:** Yeah, thanks, Flora. Very constructive suggestions. So any other suggestions from, I don't know, Cassiano or Husnain?

OK, so yeah, I would like to ask one thing. Maybe Mashroof touched upon it. You mentioned five areas of new-uh, the renegotiation process. And so what are the disagreements among these areas that you mentioned among the two parties between Canada and the US? Was there a, uh, were you able to explore the disagreement among the parties for those areas that can-- a negotiation might [? stack? ?]

**GEMMA HOLT:** I think one of the things that's interesting about this case is that the disagreement isn't necessarily between the two entities but also between all of these peripheral-- or not even peripheral. They're deeply involved. They're just not part of the formal process.

So one of the things that's been so interesting looking through all of the documents that have been-- or the statements that have been put out by the US and Canada is how identical they are. And so after each round of negotiations, they put up these statements like, oh, we made so much progress. We responded to their framework, we responded to their framework. Things are moving right along.

And all of the complexity seems to be driven by these other actors who are pushing for change. So I'm not sure if there's necessarily a ton of disagreement between the two countries around, say, the inclusion of Indigenous peoples in the negotiation process.

I think both countries are willing to expand the scope of the treaty to think about how those tribes have been harmed over the last 60 years. But the conflict then is how does the collaborative treaty mechanism respond to the needs of these stakeholders on both sides of the border? Does that answer your question?

- **DR. GAIN:** Yep. Yeah, yeah, thanks. So the second issue that I wanted to mention that you mentioned climate science is one of the future aspects that need to be considered. So is there any study that can provide details of what are the expected impacts of the climate science? Is it future flooding, or is it the impact on energy hydropower generation? So I think if you can mention those impacts, I think then it could be much more-- I think your succession could be much more solid.
- **GEMMA HOLT:** Yes, I think I left that out for complexity's sake here, but I think the main concern is this shift from a basin that's driven by snowmelt to a basin that's driven by rain. And as there is less snowmelt and more rain, the kind of flood control mechanisms change, as well as the potential management of hydropower over time. So yes, I do have sources for that, and I will include those in my final case study.
- **PROFESSOR** Gemma, I've mentioned to you a couple of times along the way that it's invisible but the states and the provincial**SUSSKIND:** governments in Canada are in fact very much calling the shots.

## GEMMA HOLT: Yeah.

PROFESSOR And they're not officially part of the entities. But remember that the US entity is led by the State Department
SUSSKIND: because allegedly this is an international negotiation, and the State Department has no relationships with the governors of all those states, no long-standing working relationships, which has caused some severe difficulty for those governors.

It may be-- you don't have to do this-- but you might want to imagine as a last little piece of your paper what it might be like and how helpful it might be to imagine a second track of negotiations convened by the US governors and the provincial leadership in BC with First Nations and tribes. They would have enormous credibility.

They said, we're getting together because we are convinced that the future of this agreement, whether it's strengthened or renewed or replaced, it needs to take account of the changing conditions from 60 years ago, and we feel those when we have responsibilities.

And if they were to organize a set of sessions with NGOs and [INAUDIBLE] on their own. The State Department I promise you would [INAUDIBLE] the same way that the Canadian agencies would show up, but they wouldn't be there in their official capacity. And if they just took three or four questions, maybe even two or three questions that are not addressed for the future in the existing treaty and laid out substantively agreements they might reach,

the same way that Bruno described local officials on both sides of the US-Mexico border initiating their own conversations, trying to come up with what they'd like to see as jointly beneficial elements of a future supplementary agreement, which then became the basis of what the US government negotiated, I think the same thing could happen.

GEMMA HOLT: Yeah.

**PROFESSOR** And I think the two big differences between then and now are that there were enormous number of positive**SUSSKIND:** benefits to be shared in the beginning.

GEMMA HOLT: Yep.

PROFESSOR And so they were getting together-- I agree that everyone who pointed out they start with friendly relationships,
SUSSKIND: it matters. But when the actual negotiators sat down-- OK, how much flood control are you going to give me? Well, how much money are you going to give me? And that was the negotiation.

Whereas now it's, OK, what restrictions are we going to impose? What dams are we going to take down? Who's going to build the new flood control systems if you take down existing dams to make salmon migration possible? It's not all about allocating gains. That's one big difference.

The second is, nobody had those concerns about salmon and climate and other natural resource questions and ecological concerns the way we do now, and that's not represented well in the entities. But the concerns are there, but the entities can't really negotiate them very well.

So I think if you look at what's different in big ways between then and now that the response to that would be most effective in the short term is to have a different track of local and non-governmental and scientific negotiators generate some of the elements of a supplementary subsidiary version or addition to the existing agreement.

And I think the governors in those states have been tracking every move in the State Department. I mean, my engagement. In this case-- I think I mentioned-- happened when I was doing training for the State Department, and the two guys who were appointed by the State Department to lead these conversations who had zero, zero background in anything Northwest, water, Canada.

They were absolutely just thrown into this and they were saying, so, we got a problem. These governors are telling us that they want to say what should happen, and we don't know how should we negotiate that.

That was the question they were asking me is, how should we do this negotiation with these governors who don't have any official role while we're trying to negotiate with the Canadians. That was the conversation. I don't think they figured it out, and I think there's enormous pressure coming on the US government from the states.

**GEMMA HOLT:** That's a thing I've been trying to untangle is the relationship of state governments to their representatives back to the federal government because so many state representatives and senators from the Northwest states have come out with various official statements and their perspective on these renegotiations. And how are the Washington senators coordinating with the Washington governor to get things back to the State Department, like trying to tease out all of those--

**PROFESSOR** They're not.

## SUSSKIND:

GEMMA HOLT: They're not?

**PROFESSOR** They're not. That's for show. That's-- we're trying to make political capital on the legislative side. The key is the governors. The key is the governors have the access to the White House.

GEMMA HOLT: Yeah.

PROFESSOR The governors only care later about getting the Senate to ratify any change in the treaty. Between now and then,
SUSSKIND: the House of Representatives, the governors don't care to talk to them. There's nothing they're going to do for this. So my sense is that when you see state legislators and congressional legislators from the states making noise about this issue, it's political self-promotion to try to gain some advantage from all of this. But it isn't because they expect to be part of solving it.

**GEMMA HOLT:** Got it. That's good to know. That's helpful.

PROFESSOR But it is wonderful to have somebody say it was a successful treaty. Yeah, I think that's great. A successful waterSUSSKIND: treaty between two countries. Wonderful.

**GEMMA HOLT:** It's basically worked the way it was supposed to for a long time.

PROFESSOR And we have parallel negotiations after 50 years in Latin America. We didn't spend much time on it, but there are negotiations between different countries in Latin America where treaties that existed over shared waters for 50 years are up. And you can't just extend the treaty. Everything has changed so much. But nobody knows, well, but we've had this treaty in 50 years, it's worked. Why should we mess with it?

Well, because the conditions are all changed. But that doesn't translate into a specific strategy for how to do the negotiation. In my view, if there is anything we've learned, it's that you need to get all the stakeholders-- I mean Aron, one of his four conclusions, you need to get all the stakeholders into this story. Well, you can't do that in an official treaty renegotiation. So you have to run a parallel effort and get the other stakeholders into the substance of what should the new agreement say and why.

And as Bruno has shown, if you can get agreement at the next level down from the National government on the two sides and you have real players with stakes, and they say, this is what we think. Whether it's you're changing the treaty, you're extending it with a new supplementary terms. However you doing it, here's the substance, and we all agree with it, and we'll all support it. That for me is what a diplomacy framework meshes with the political reality of the treaty renegotiation.

But I think the presentation was terrific. It's such an interesting circumstance. I don't think you can conclude anything at this stage, but I think you can say, as you have, look, this is a problem. Treaty renegotiation, treaty extension. Here's what they face. Here is how they got into it. Here's what they're trying. Maybe they could try this. But I don't think anyone can hold you or anyone else to trying to come up with a conclusion about anything in this case at this stage of the game.

**GEMMA HOLT:** I think we're at the lessons learning phase more than we're at the lessons learned phase.

PROFESSOR Yeah.

SUSSKIND:

GEMMA HOLT: Maybe in a few years, someone can update it.

**PROFESSOR** I hope so. We'll give them your paper to start with.

SUSSKIND:

DR. GAIN: So, thanks, Gemma again, for the presentation. And also thanks--

**GEMMA HOLT:** Thank you all for your feedback.

DR. GAIN: For the presentation. So next week, we'll have last two cases by Mashroof and Flora. And as I already mentioned that the deadline for submission is on 21st of May. So yeah, we are expecting much more [INAUDIBLE] presentation and also much more final piece of your work in the next week.

And as I already mentioned that please provide your feedback by May 24. I guess you already-

**PROFESSOR** Yeah, on the whole course.

SUSSKIND:

**DR. GAIN:** Yeah, for the whole course. [INAUDIBLE] already.

PROFESSOR Add a footnote to what Animesh said at the outset. MIT has this online, give it a rating, here's a set of questions.SUSSKIND: And then they say what the average score was on each question by averaging across whoever happened to answer.

I do not find this system helpful. I've never learned anything from that device, and I have always asked people to please just send a paragraph, something. What do you think the strengths and weaknesses of the course are, and what idea do you have about something we could do to improve it in a conversational just rough draft email.

That's how I learn stuff about what we do in the course and how to improve it. So yes, MIT would like you to please fill out the formal evaluation form, and we'll live with whatever the numerical score is, whatever that means. But we really would like to learn something from you. We made a decision to have guest presenters, particularly guest presenters. Did we make good choices? Did we give them good advice about how to structure what they were presenting?

Animesh and I tried to provide the water diplomacy framework in some more exploratory way at the outset. We asked everyone to pick a case and write a case. We used the Aquapedia frame so that people have some common device because it's worth it because we've published your paper in the Aquapedia. I mean, so we make a bunch of decisions. Those could all be different.

**DR. GAIN:** Yeah, and also the last thing I would like to mention that last year two students-- so one of the students was able to submit their final paper into a journal article. So it's already submitted in one of the journal article. Another student is still working on that, and another student was able to publish their article in a newspaper. So this kind of thing says-- these are the practical things. So all these are the possibilities that you can do, and I am happy to support you. So yeah, I think-- yeah, it's very practical.

PROFESSORIt's very encouraging to us that there's peer acceptance and excitement about the things that are produced inSUSSKIND:the course. So we tell the stories of people whose papers became theses or dissertations or their papers became<br/>articles in peer-reviewed journals or their papers turned into op eds. This is all for us one indicator that people<br/>are getting something out of the thinking, reading, writing, listening, talking that happens in the course. So we<br/>hope you'll think of a way to capitalize on all the work you did in some other outlets if you can, and we'll help.<br/>We'll help.In some cases, it takes another year to deal with the journal that wants more elaboration. And we'll be glad

online to help you if you want to follow up on any of this.

- **DR. GAIN:** Is there any other specific issue that you would like to mention maybe for the final paper or other issue?
- PROFESSOR Everybody's just doing some wonderful work, and we're very excited about the products. See everybody nextSUSSKIND: week for the last go at this. All right.
- **DR. GAIN:** Bye. See you next week.
- **GEMMA HOLT:** Thank you all.
- DR. GAIN: Thank you, everybody
- **PROFESSOR** Great work today. Thanks!

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