**Audio Transcript – ‘Til the landslide brings it down**

*Note: Episodes of Outside/In are made as pieces of audio, and some context and nuance may be lost on the page. Transcripts are generated using a combination of speech recognition software and human transcribers, and may contain errors.*

**Nate Hegyi: I’m Nate Hegyi. This is Outside/In.**

*In tape: It’s about 38 degrees. Slushy snow. Clouds. Classic Juneau, Alaska day.*

**Earlier this year, I was jetlagged. Cold and waiting for a guy named Tom Mattice to meet me at a parking lot in Alaska’s capital city.**

**When he finally pulled up, he was driving a giant white Ford pickup truck with a bumper sticker that said:**

*Nate Hegyi: ‘fishin magician’*

*Tom Mattice: Yeah, it’s an old plow truck from Oregon that I painted up.*

*Nate Hegyi: It looks good!*

**Nate Hegyi: Tom’s lived in Juneau for about two decades. He wanted to meet me at the city’s famous shrinking glacier.**

**Mendenhall.**

**We watched as people walked across a giant frozen lake to see the glacier’s ice caves.**

*Tom Mattice:  you want to see me out on that ice? Probably not. There's springs and creeks coming out from underneath the ice over there, and the ice still calves over there. And you could go over there and have a piece of ice the size of a house fall off and crash right through the ice. So I'm a little, always, always a little nervous on the lake. It's pretty safe. But, uh, you definitely want to pay attention.*

**Nate Hegyi: Tom is used to thinking carefully about risk. He’s emergency programs manager for the city and borough of Juneau.**

**It's basically his job to stop people from getting killed. Not only from ice… but from landslides too.**

*Tom Mattice: The mountains are young, the mountains are very straight up and down. And every time we get precipitation and every time the wind blows, little pieces of Earth go downhill with gravity. And sometimes that's grains of sand, and sometimes that's the mountainside. And when's it going to stop? When it turns into the Sahara Desert and it's all nice and flat.*

**Nate Hegyi: Or… to put it more simply:**

*Tom Mattice: Remember, in the end, sh\*t rolls downhill.*

**Nate Hegyi: “Stuff” has been rolling downhill in Juneau for a very long time.**

**It was built as a mining town in the 19th century - a bowl surrounded by steep mountains on all sides.**

**Back in 1936, a landslide tore through downtown and killed 15 people.**

**A local paper described the bodies as bruised and discolored, as if, quote “hurled through a mighty grinder.”**

**But smaller landslides happen almost every year.**

*Christine Woll:  I had never lived in a place that had landslide risk before, so I didn't think twice about the fact that there was a very steep hill behind me.*

**Nate Hegyi: This is Christine Woll - she’s one of Juneau’s nine elected assembly members.**

*Christine Woll:  And, uh, soon after I moved out of that place, um, some large trees actually slid down the hill and through the wall, back walls of the house, and no one was injured. But I know there was significant amount of damage to the property.*

**Nate Hegyi: The point is… the people of Juneau are in a fight with gravity.**

**Tom told me about a group of Swiss avalanche scientists that recently came to visit:**

*Tom Mattice: When they show up, they look and say, you let people live there? And it’s like, well, we live in Alaska. We have a long history of loss in Alaska and rugged individualism in Alaska. So people made their own decisions and decided where they want to live, not all of them in the best places.*

**Nate Hegyi: The city got real about the dangers in the 1980’s. They funded and then published a hazard map for downtown Juneau…  that showed the combined risk of both avalanches *and* landslides.**

**Then they passed building restrictions for areas that were in really high risk zones.**

*Tom Mattice: if it's on the map in such a way that it could experience significant loss of life and property, we probably shouldn't build a lot of things there, and we limited those properties to single family dwellings. You can't build a condo, you can't build an apartment, you can't put an accessory dwelling on your property if you already have a property.*

**Nate Hegyi: But flash forward to today… and the city’s climate is changing. Juneau is becoming warmer and wetter. Which actually means fewer avalanches…  but *more* landslides.**

**So in 2018, the city got a small grant from the federal government – about $200,000 – to make some new hazard maps for the downtown area.**

**They hired a well-respected company out of Canada to do it.**

**And when they handed over their work……the landslide zone had expanded. *Big time.***

**Now more than 200 homes, condos and restaurants were considered at risk.**

**That’s roughly *a quarter* of downtown Juneau.**

*Tom Mattice: when you find out things that you don't want to hear, the question is how you swallow that.*

**Nate Hegyi: These new hazard maps presented the city with a very inconvenient - and frightening -- set of facts.**

**But that's the thing about risk -- just because something bad could happen... doesn't mean it definitely will, right?**

**So in a world made more dangerous because of climate change, what is Juneau, what are any of us... supposed to do?**

*Assembly meeting: Do we really have to adopt these maps? I love my home… I don’t want to leave.*

**Nate Hegyi: This again, is Outside/In. STAY. TUNED.**

*Nate Hegyi (In tape): 634 634. Okay, perfect. Oh, ve. Oh, this is a fun house.*

**Nate Hegyi: There’s a neighborhood in Juneau that looks like it was plucked from the hills of San Francisco, and plopped into the middle of a rainforest.**

**Think steep, narrow streets - and rows of colorful houses.**

*Eve Soutiere: We call it Teva Adamah. It's a Hebrew for the Red Ark.*

**Nate Hegyi: One of these houses is red and purple… with rainbow-colored steps.**

*Eve Soutiere: my husband, um, kind of named it. And an ark is a place of sanctuary.*

*Nate Hegyi: And does it feel like a sanctuary to you?*

*Eve Soutiere: It does, it does. it's kind of like living in a tree house, uh, because we're clinging to the side of the mountain and we're in the trees, and it's just. It was the perfect house for us.*

**Nate Hegyi: This is Eve Soltiere. She has lived in this house for 9 years.**

**Eve painted her stairs rainbow colored after she thought the supreme court might ban same-sex marriage a couple summers ago.**

*Eve Soutiere: it's been wonderful because tourists come. People have asked if they could take pictures with with themselves sitting on it. And I've met a lot of people that way. It's been wonderful.*

**Nate Hegyi: You can probably tell, but Eve is very progressive. And she *knows* the climate is changing. She’s even pushing the city to reduce its carbon footprint.**

*Eve Soutiere: I honestly believe global climate disruption is is completely changing the calculus for us.*

**Nate Hegyi: But then in the summer of 2021, the city of Juneau quietly published a draft of the new hazard maps on their website.**

**And that is what got the ball rolling.**

*Eve Soutiere: The neighbors all talk and they were like, hey, have you seen this?*

**Nate Hegyi: Eve knew *her* place had a slight risk for landslides. After all, the boundary of the old hazard zone ended at her property line… almost right at her back door.**

*Eve Soutiere: We've got spruce trees hanging over the house. but it was when it was listed, when we kind of looked at it, it it. They said that it was in a mild or low risk area.*

*Nate Hegyi: And what was your reaction when you saw you went from very little to severe?*

*Eve Soutiere: What are they smoking like? How how is that even possible?*

**Nate Hegyi: To understand one reason why these maps were so unpopular, you have to understand a thing or two about the term: landslides.**

**It’s a broad category of disaster.**

**They can include everything from a bunch of loose rocks, tumbling down a hill and damaging the outside of a house,**

**To the entire hillside liquifying, and wiping out whole neighborhoods.**

**Also, the timeline is unpredictable.**

**Unlike say, avalanches, which tend to happen in the same places, and during the same time of year - a landslide zone can go decades or even centuries before finally giving way.**

**So if you’ve gotten away with it for a long time - it’s tempting to think you can just roll the dice and be ok.**

**But even for Eve Soutiere, whose initial reaction to the maps was one of disbelief…**

*Eve Soutiere: How? How is that even possible?*

**Nate Hegyi: There *are* nights when Juneau scares her.**

*Eve Soutiere: we get these crazy rains where just it days and days and days. Um, and the ground outside will be squishy.*

**Nate Hegyi: On one of these recent rainy nights, part of her** [**neighborhood was evacuated**](https://www.ktoo.org/2023/08/13/small-landslide-on-starr-hill-prompts-evacuations-warning-from-city-officials/) **after a small landslide. Eve stayed put – her house wasn’t under notice:**

*Eve Soutiere: But that night, I didn't sleep very well. I was outside looking at the trees. The wind was howling. Um, making sure that the ground wasn't moving as the trees were swinging. Um, and just checking to see where that water was draining.*

**Nate Hegyi: The worst kinds of landslides - the ones you see on the news - are called debris flows.**

**It’s a scientific term for something that looks anything but. A horrible jumble of trees, boulders, and mud, traveling up to 35 miles per hour.**

**According to emergency authorities, a lot of the people killed in debris flows are sleeping on a ground floor when the mud flows in.**

**Eve still believes that *her* home isn’t likely to get destroyed by a landslide… but she also isn’t Pollyanna about it.**

**She compares it to flying a plane… which is something she actually does.  She’s a pilot.**

*Eve Soutiere: I think we all assume a certain amount of risk every time I preflight. I assume that risk every time I take off. I assume that risk. I know what the risk is, and for me, it's worth it. This place to me is my sanctuary. And, um, you'd asked me before why? And I think it's because of love. You'll do a lot for love.*

**Nate Hegyi: The thing about love is… when you’re in the thick of it… it’s easy to ignore the red flags. The maps can’t be accurate, right? That the one you love… would never *really* hurt you.**

**We’ll risk a lot for love. But banks and insurance companies?**

**That’s another story.**

**Hey this is Outside/In, I’m Nate Hegyi.**

**Juneau is like the Adam Driver of towns. A little rough around the edges, a little dangerous, but also very easy to fall in love with.**

**It’s got cozy coffee shops, breweries, trails that wind into the mountains from downtown. You can drive 15 minutes and see humpback whales breaching off shore.**

**It’s also the state capitol, so there are also lots of high-paying jobs here. The Coast Guard has a base. Hundreds of people move to Juneau every year… but the number of homes is limited.**

**Eve Soutire was lucky.**

*Eve Soutiere: I know of an attorney who lived at the Juneau hotel for several months before they were able to find a place to live.*

**Nate Hegyi: The market is tight.**

**So that's why I was so surprised when I went on Zillow and found a cute little red house that had been sitting unsold for months.**

**Turns out… it was in the severe landslide hazard zone.**

**When I called up a local mortgage lender, she told me that banks were wary of lending on homes there.**

**It wasn’t worth the risk to them, in part because in southeast Alaska… you can’t get landslide insurance.**

**It’s been that way since 2015.**

*CBS News clip: Three people are missing in Alaska this  morning after devastating landslides tore through a small city - at least three landslides swept away several homes in Sitka yesterday… The city’s fire marshall is among the missing…*

**Nate Hegyi: The Sitka landslides - about 90 miles southwest of Juneau - were a reality check for the insurance industry.**

**They pulled coverage across southeast Alaska because they realized they probably wouldn’t make a profit.**

**Here’s why:**

**Landslides and other big natural disasters are known as catastrophic risks.**

*Lloyd Dixon: Meaning that there can be multiple properties affected at the same time, so the risks are correlated and insurers like to see risks that are independent. If there’s a loss on one property it doesn’t mean there is going to be a loss on multiple properties.*

**Nate Hegyi: This is Lloyd Dixon. He’s a senior economist with the RAND corporation who focuses on natural disasters and insurance.**

**He says that for insurance companies to offer packages for big disasters like landslides, they need a lot of people buying that coverage to make it financially worthwhile.**

**But in Southeast Alaska… that hasn’t always been the case.**

*Lloyd Dixon: There really didn’t seem to be a lot of demand for them.*

**Nate Hegyi: Turns out, this is a very normal, human tendency:**

*Lloyd Dixon: there's been research that that, you know, says that people tend to, um, you know, underestimate low probability risks that, you know, if you don't see it very often, you tend to just sort of out of mind, out of sight. Not going to happen to me. Um, and people just ignore it.*

**Nate Hegyi: In other words… that rugged individualism – I’ll take my own risks, damn the consequences – had damned southeast Alaska right out of landslide insurance.**

**Making homes inside this brand new hazard zone tougher to sell.**

**And this is what really freaked locals out about the maps.**

*Assembly meeting: I’d like to call to order the regular planning commission…*

**Nate Hegyi: More than once, the city of Juneau has hosted public neighborhood meetings about expanded landslide zones. Dozens of people expressed their worries… including Mary.**

*Mary Ellen Duffy: My name is Mary Ellen Duffy, I live in the Westridge Condos, downtown.*

**Nate Hegyi: Mary is a lifelong resident of Juneau living on a fixed income. In the video, you can see her sitting at a white table in front of one of those long, black skinny microphones you see in movies. The ones where a main character sweatily testifies in front of Congress.**

*Mary Ellen Duffy: My Westridge Condo is my home, my retirement and my life investment.*

**Nate Hegyi: Mary told the commission she might have to sell her home because the property taxes were too expensive.**

**but now it’s been placed in a severe landslide hazard zone, she might not be able to find a buyer.**

**Banks don’t want to offer loans for houses that might get flattened by mud.**

*Mary Ellen Duffy: When I spoke with the city assessor, her comments stunned me. She said if I can’t afford to live in my own home I can move elsewhere. Never mind that the banks might not lend, making resale questionable.*

*Seriously? Just pack up everything and go find another place to live?*

*I could afford this Condo when I bought it and I love my home.*

*I don’t want to leave.*

**Nate Hegyi: What all this means, is that the only people who would afford to buy homes in these areas will be wealthy - people who can pay cash, or offer some kind of big collateral in order to secure a loan.**

**But… do you really want people buying up houses in severe landslide zones anyway? Isn’t the whole point to restrict these areas, to keep people safe?**

*Moderator: and, Albert, I believe the mic is still on, so you could say, install your name for us. You have 3 min.*

*Albert Shaw:  my name is Albert Shaw. I live on 300 hermit street.*

**Nate Hegyi: Albert Shaw was one of the few people advocating for what is sometimes called “managed retreat.” Which is saying something, because Albert has lived in Alaska since *before it was officially a state*.**

*Albert Shaw:  I’m one of the last persons standing that saw the mud against the cold storage in 1936. It killed people.*

**Nate Hegyi: He’s referring to that deadly landslide in 1936 that the local newspaper called a QUOTE “mighty grinder.”**

**The “cold storage” was a building downtown that held salmon on ice for local fisherman.**

**Now he was sitting in front of the assembly, pleading with them to start a home buyout program.**

*Albert Shaw:  How that’s going to be decided really has to be worked out. We need a lawyer. But we need to get people out of there. Just because nothing has happened in 60 years doesn’t mean something won’t happen soon.*

**Nate Hegyi: I talked to Tom Mattice, the city’s emergency programs manager about the buy-out idea. He likes it, in theory. But he also knows that programs like that cost money.**

*Tom Mattice: There are some federal grant programs which you can apply to mitigation towards buyouts and relocations. Those grants come with cost shares.*

**These cost shares mean that the localgovernment is still on the hook for 25 percent of the purchase and demolition.**

**And who ponies up the cash?**

**You. The taxpayer.**

*Tom Mattice: Mitigation is the right thing to do. But the question is at what cost to who? Because you kind of have to rob Peter to pay Paul, right?*

**Nate Hegyi: But isn’t that the point? Buy-out programs are actually supposed to *save* money… because the cost of a big disaster can be MUCH bigger than the cost of preparing for it.**

**Nate Hegyi: All across the country, climate change is knocking on people’s front door. The risk is there - but the safety net isn’t.**

**In Oregon, state officials withdrew a new wildfire map after residents worried about losing their insurance.**

**In Indiana, a new state flood map was rejected after locals worried about what it meant for their property values.**

**In Sitka, that town 90 miles from Juneau where landslides killed three people a decade ago, city officials *removed* landslide restrictions from the city’s building codes.**

*Christine Woll:  when I was growing up, if your community was hit by a natural disaster you would expect the federal government, the state government to come help. And I think that has shifted.*

**Nate Hegyi: When you talk to Tom Mattice , and Christine Woll, the assemblywoman - you get the impression these are issues the smaller cities are simply not equipped to handle.**

**Rather than tackling the risks of climate change - they’re backing away from the evidence that shows it creeping up in the first place.**

*Christine Woll:  With climate change, we have so much more, risk and natural disasters happening… When people come to their local community and say, now it’s your responsibility. it's complicated for us to figure out as the last line of defense when our state government and our federal government and our insurance companies are no longer providing that. And so I find that that is. Um. Something that. Uh, people aren't. Really grappling with.*

*Beth Weldon: Ms. Hale, will you lead us in the flag salute? I pledge allegiance to the flag…*

**Nate Hegyi: It’s December of 2023. The nine-person Juneau assembly is gathered around a u-shaped desk. It looks like a low budget game show.**

**There is harsh fluorescent lighting. Gray carpet. Tired looking faces. All the markings of a small town meeting at city hall.**

*Beth Weldon: We will bring the regular assembly meeting to - whoo that’s an echo*

**Nate Hegyi: The assembly was gathered to decide how best to respond to the expanded landslide zones..**

*Assembly member: Thank you madam mayor, this is ordinance 2023-18, an ordinance amending the city and borough of Juneau code related to development in landslide and avalanche areas…*

**Nate Hegyi: They had spent 3 years scrutinizing them. Debating  whether to add new building restrictions.**

**Meanwhile, a landslide had recently killed a family of five in the nearby town of Wrangell, Alaska.**

*Beth Weldon: This is not a perfect document in any way, shape or form. But with your help we made it as perfect as we can, so..*

**Nate Hegyi: I said earlier in the episode that there were already building restrictions in place  in the landslide zone. Ever since the 80s, new apartment buildings and condos couldn’t be placed in severe hazard zones – not without special permissions and an engineer’s approval.**

**By adopting the new landslide map - they’d be expanding those restrictions… Throttling new development downtown in the midst of a housing crisis.**

**So instead… They went in the opposite direction.**

**The Juneau assembly  lifted the restrictions altogether.**

**That includes lifting the *previous* restrictions set back in the 1980s.**

**In other words, this ordinance could potentially put MORE people in the way of serious landslides.**

**Not all the assembly members loved this idea.**

*Assembly member: Wrangell experiencing a tragic loss of life with their landslide and Haines before that. I of course, like all of you, hope that doesn’t come to pass in Juneau, but as climate change continues and it does get warmer and wetter… that is a real danger and so I just want us to be clear-eyed that there are not a lot of safe places to live in Juneau and this is where we’ve chosen to live. so I just want to note that. And I remove my objection.*

**Nate Hegyi: Even the mayor didn’t exactly give a full throated endorsement…**

*Beth Weldon: I know you’re not thrilled with it. I can tell you I’m not thrilled with it and I probably have a little bit of a different view than some because of my public safety background but this is the best that we could probably come up with. So with that I’ll remove my objection… Seeing no objection, this ordinance passes.*

*Christine Woll:  I wasn't perfectly happy with the compromise.*

**Nate Hegyi: Assemblywoman Christine Woll.**

*Christine Woll:  me as a property owner, would I want to live in some of those areas? No, that's that's my risk tolerance.*

**Nate Hegyi: To be clear: The landslide maps still exist.**

**But the official policy of city planners is to basically ignore them.**

*Christine Woll:  they're on our website. And people can use them to inform themselves about where they live. Um, but there were no longer regulations associated with those landslide maps. Does that make sense?*

*Nate Hegyi: Oh, it does, yes. But it also feels counterintuitive, like why remove why remove the building restrictions in these dangerous zones?*

*Christine Woll:  Yeah. So that's where this, um, I think the complexity of this issue comes in. Um. I very strongly believe that, um, the public has a right to know where these hazards and where these risks exist Where I think the Assembly was having a harder time was do we have the right to tell people what they can and can't build in those areas? And so, we decided, let’s inform people, and they can make that choice about whether that’s a risk they want to take or not.*

**Nate Hegyi: But is it really a choice?**

**There is a common myth out there that ostriches stick their head in the sand to avoid a predator.**

**It was actually started by** [**Pliney the Elder**](https://www.abc.net.au/science/articles/2006/11/02/1777947.htm#:~:text=The%20myth%20that%20an%20ostrich,about%20the%20world%20around%20him.) **who wrote it in the world’s first encyclopedia.**

**But it isn’t true.**

**When a predator comes, an ostrich *runs*. At speeds up to 40 miles an hour.**

**But what if there’s nowhere to run to? if you can’t sell your home… Or you’re a renter trying to find a place to live during a housing crisis… it seems like there are even *fewer* safe options than there were before.**

**Because in Juneau, the city told people about a danger… but they had no plans for what came next. No buyout. No managed retreat. No place to run.**

**So it’s no surprise people stick their heads in the sand.**

*Eve Soutiere: I love my neighborhood, I love my neighbors. I had never dreamed I'd be able to live in a place like this.*

**Nate Hegyi: That’s Eve, the pilot who lives in the little red and purple house with the rainbow stairs. She’s comfortable without the hazard maps. She’ll take her own risks.**

*Eve Soutiere: I guess for me my hope is if it happens, I can either get out of the house or be found pretty quickly, or it's all over really quickly. I've thought about it though.*

*Nate Hegyi: And is that kind of your calculus is like in the same way that if it's a plane and it, you know, something tragic happens with the plane, it's kind of like, all right, I'm comf– comfortable isn't the right word to use. But if this is if this is the way I die, I'm okay with that.*

*Eve Soutiere: Yeah, absolutely.*

**Nate Hegyi:  This episode was written and produced by me, Nate Hegyi.**

**It was edited by the mayor of Outside/In, Taylor Quimby… with help from Katie Colaneri, Felix Poon, and Justine Paradis.**

**Special thanks to Meredith Trainor and Zachary Provant.**

**We’re going to have links to the landslide hazard maps, along with some studies on Juneau and the insurance industry in the show notes.**

**NHPR’s esteemed head of podcasts is Rebecca Lavoie.**

**Our theme music is by Brakemaster cylinder. Music by blue dot sessions.**

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