Sawbones 304: The Chicago River Reversal

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[audience cheers]

Intro (Clint McElroy): Sawbones is a show about medical history, and nothing the hosts say should be taken as medical advice or opinion. It's for fun. Can't you just have fun for an hour and not try to diagnose your mystery boil? We think you've earned it. Just sit back, relax, and enjoy a moment of distraction from that weird growth. You're worth it.

[theme music plays]

[audience cheers]

Justin: Hello everybody, and welcome to Sawbones, a marital tour of misguided medicine. I'm your cohost... Justin McElroy.

[audience cheers]

Sydnee: And I'm Sydnee McElroy.

[audience cheers louder]

Justin: Okay. That's...

Sydnee: Thank you. [laughs quietly]

Justin: That's actually only weird because a bunch of you promised before that you would cheer louder...

[audience laughs]

Justin: ... for me. So I guess you rethought it. Huh. Alright, well, I'll remember that. *Dylan*.

Sydnee: [laughs] Don't put people on blast at the beginning of the show. That's the wrong energy.

Justin: Dylan knows what he did.

[audience laughs]

Justin: He's skulking out of the theater.

Sydnee: Uh, I am so excited—

Justin: [loudly] His pants fell down! Now who's the idiot, Dylan?!

[audience laughs]

Sydnee: Alright. Are you done yelling at Dylan? [laughs]

Justin: Yeah.

Sydnee: I apologize, Dylan. I can't do anything with him. Um... [laughs] I am so excited to be here! We mentioned before we came to Chicago that we needed topics related to Chicago, and I got so many suggestions.

Justin: Mm-hmm. You all have been sick a lot, huh?

[audience laughs]

Sydnee: It was great. I was overwhelmed. I was inundated with suggestions. Um, now, the majority of them *were* about Malort.

[mixed cheers and boos]

Sydnee: [laughs quietly] Which—which is, uh, great. It's not, but that was great. [laughs] Um, I don't think I could—I don't know how I would do an entire show about that, but I felt like we had to mention it first?

Justin: Okay.

Sydnee: We had to at least talk briefly. Because when I said, "Wow, Justin, most of the suggestions we got were about Malort." I felt like you didn't really understand why. I said, "I do a medical history podcast. What should I talk about in Chicago?" And people were like, "Liquor. [laughs] This liquor. Talk about this—it's bad! Talk about it!" [laughs] Did you—did—

Justin: I have no...

Sydnee: Do you still not—I never told you. You still don't know why—

Justin: Still don't know why.

Sydnee: Uh, it's funny, 'cause we were talking about it backstage, and Travis said it seems like like the kind of thing that probably, like, was secretly sold during prohibition, because it tasted so bad, people thought it was, like, medicine, but it wasn't. [pauses] Which is exactly... [laughs quietly]

[audience laughs]

Sydnee: ... *exactly* right.

Justin: He, like, retconned that. Into history.

Sydnee: That—it's exactly right about Malort! So, it was brought to Chicago by Carl Jeppson, a Swedish immigrant.

Justin: Carly Rae's great great grandfather.

Sydnee: [laughs]

[audience laughs]

Sydnee: And it's, uh—it's, like, based on a Swedish basque liqueur, which is, like, different kinds of herbal liquor kind of drinks, except this one is made with just wormwood, like absinthe. Like, this was—even when absinthe was illegal, for years and years, you could still get Malort, which also has wormwood in it, which is kind of strange.

But, that's probably why it doesn't taste so great, 'cause it's, like, super bitter. And usually, I guess, with this liqueur, they put other stuff in there. But Jeppson was like, "No... way."

[audience laughs]

Sydnee: "All I'm puttin' in there is the wormwood, and it is gonna be *so* bitter." And also, I—the rumor was that he was a really heavy smoker and had just, like, destroyed his taste buds. And so for him he was like, "I can taste it!"

[audience laughs]

Sydnee: "That's a plus."

Justin: Like the observer, eating really spicy food on Fringe.

Sydnee: So, he would indeed—[laughs quietly]

Justin: Thanks, Fringe-heads!

[audience laughs]

Justin: Both of you.

[audience laughs]

Sydnee: I'm there with you. I love—I love Fringe. Uh—

Justin: It was just to entertain *you*. I don't care what they think.

Sydnee: And I love it! So, he would indeed sell his Malort out of a suitcase on the sidewalk. [holding back laughter]

[audience laughs]

Justin: Just regular... just a regular drink.

Sydnee: No, it was a medicine! That's even better! "Here's a medicine I'm selling out of my suitcase on the sidewalk. But it's *medicine*, not alcohol. It just happens to have alcohol in it."

And the—the story is that when, like, police officers would come by during prohibition and be like, "Now... is that really medicine? Or... are you just sellin' booze?"

He'd say, "Try some."

[audience laughs]

Sydnee: And they would take a drink and go, "[shakily] Okay. [laughs] That's gotta be medicine, 'cause who would ever drink that for fun?" Um, of course our friend John Hodgman is a big fan of Malort, and—

[scattered cheering]

Sydnee: That was our introduction, or at least, that was mine.

Justin: Yeah.

Sydnee: My introduction to Malort. And he describes it as tasting like pencil shavings and heartbreak.

[audience laughs]

Sydnee: I believe. I think that's...

Justin: Yeah!

Sydnee: ... that's an accurate description. Um, the—of course, Malort is still around for all your stunt drinking needs. [laughs]

[audience laughs]

Sydnee: Um, not for medicinal purposes anymore. It—I don't think it—it doesn't do anything for you medicinally. Um, the label, though... this is the last thing I'll say about Malort. The label used to be—it used to have this big, long... I guess ad? [laughs] On it? Um, it doesn't anymore. But what the label for Malort used to say—and I just had to mention this. It says, "Most first-time drinkers of Jeppson Malort reject our liquor. Its strong, sharp taste is not for everyone. Our liquor is rugged and unrelenting..."

[audience laughs]

Sydnee: [laughs quietly] "... even brutal to the palate. During almost 60 years of American distribution, we found only one out of 49 men will drink Jeppson Malort." [holding back laughter]

[audience laughs]

Sydnee: "During the lifetime of our founder, Carl Jeppson was apt to say, "My Malort is produced for that unique group of drinkers who disdain light flavor or neutral spirits. It is not possible to forget our two-fisted liquor.""

[audience laughs]

Sydnee: "The taste just lingers and lasts, seemingly forever."

[audience laughs]

Sydnee: "The first shot is hard to swallow." [holding back laughter] "Persevere. Make it past two shot glasses, and with the third, you could be ours forever."

[audience laughs]

Sydnee: [holding back laughter] Which is great.

Justin: [unenthusiastically] It's great.

[scattered cheering]

Sydnee: I—I love you, Chicago. It still tastes bad, though.

Justin: I—I feel like two thirds of the fast food industry is doing this exact policy, right?

[audience laughs]

Justin: "[overly macho voice] We *know* it's frigging gross, but go ahead and eat it anyway, nasty!"

[audience laughs]

Sydnee: But that's not the—as I said, I don't—I couldn't find a way to make an entire show about Malort. But, uh, I did find a story that multiple people suggested. Uh, thank you to Ella and Hannah and Christian, if any of you are here. That, uh—this was a great story about the time that Chicago reversed the flow of its river.

[audience cheers]

Sydnee: Which... I had no idea about this, and as a person who—I'm not an engineer. I was never particularly good at, like, physics, or geography, or anything related to this... I found fascinating. And it is related to healthcare and medicine. That was, like, the primary reason. But I wanted to get into the story of how and why, uh, Chicago decided that the Chicago River should flow the other direction.

So. Back-

Justin: I was unaware one could just decide this.

[audience laughs]

Sydnee: I—I didn't know either! I know, I read that and I thought, "Well... how do you that?" [laughs] I'm gonna tell you how you do that, yeah.

Justin: Okay, sorry. I shouldn't have interrupted.

Sydnee: So, it used the—the river used to flow *into* Lake Michigan. Of course, now it flows out, the other direction, and joins the Mississippi River system. Uh, back in the mid-to-late 1800s, when it all flowed the other direction, Chicago was growing.

The population of Chicago was just, like, doubling and doubling, and more and more people were moving in, and as more and more people were moving into the city, there were businesses moving in, and a lot of animals. Things like stockyards being built, and all of these people and animals and factories and businesses were dumping all of their people and animal and factory waste... into the river.

So, the river was getting *really* nasty, and you can read about that—that is not the primary purpose of the book, but if you've read The Jungle by Upton Sinclair—

[scattered cheers]

Sydnee: —which, that could've been a whole other show. [laughs]

Justin: Big cheer, there.

[audience laughs]

Justin: Hmm. "That's about us. Absolutely."

[audience laughs]

Sydnee: [holding back laughter] It's about the dangers of the meat packing industry in the late 1800s. Woo!

[audience cheers]

Sydnee: Uh, but he described the water as well as all the other really gross things in the book. You can also read about the water quality. And he talks about how, like, the river, there were parts of it that were so filled with, like, animal bits and... [laughs] leftover stuff and waste, that the surface of the water was semisolid.

[scattered groans]

Justin: Ugh...

Sydnee: It was said that, like, a chicken could walk across it.

[audience laughs]

Sydnee: *Maybe* a human. But you don't wanna try. [laughs] But maybe. There was a particularly bad stretch that, uh, that Sinclair referred to as "the great open sewer," but this particular stretch was known as Bubbly Creek by locals.

Justin: Blugh.

[scattered cheers]

Sydnee: It's still called that, is my understanding. Uh, and it's actually—and it was bubbly because of all the methane from all the decomposing things in the bottom [through laughter] bubbling up... to the top.

Um, and it's still, I guess... the cleanup effort is still underway to fix Bubbly Creek, although it does look *way* better than it did in the pictures I've been—I've been researching on the internet.

Justin: Keep at it, y'all.

Sydnee: Yeah.

[audience laughs]

Sydnee: Uh, so, now, all this in the river—

Justin: At the end, change the name, though.

Sydnee: [laughs] Yeah. Once it's not bubbling anymore.

Justin: Nice—Nice Creek.

[audience laughs]

Justin: Or perhaps... Good Creek.

[audience laughs]

Sydnee: Clean Creek. [laughs] Can Eat the Fish Here Now. [laughs]

Justin: Delicious Creek.

Sydnee: Don't eat the fish there now, but... later. Uh, so, the fact that all of this was floating in the river was—I mean, it was unpleasant, probably, if you lived there, uh, at the time. If you looked out at the river and there were, like, gross... you know, there was human waste. Like, open... human waste, just floating down the river. And so—

Justin: You can say dookie. You're a doctor. There's—

[audience laughs]

Justin: There was dookie!

Sydnee: So—and, like, even sometimes, because of all the grease and stuff on the surface of the water, it would, like, catch fire! Which—

Justin: [through laughter] Which is good, 'cause that got rid of some of the dookie!

[audience laughs]

Justin: Ev—the wa—the lake—the creek would be on fire and everybody'd be like, "Nice. Good."

[audience laughs]

Justin: "That's gonna get a lot of the bad stuff. Excellent."

Sydnee: Well, that's probably, like, scary. [laughs]

Justin: Have y'all tried that, actually? Set it on fire! That'll take care of it.

Sydnee: [holding back laughter] No, don't do that, please. No, that's—and that's scary and, like, kind of surreal, probably. And also not great for tourism, or like, "Hey, our city's on the grow." [laughs]

Justin: Or—or great for tour—yeah, except *awesome* for tourism.

[audience laughs]

Justin: If YouTube would've existed back then, that would be the whole thing, right? Like, "Hey guys, I'm here, I'm takin' the Bubbly Creek challenge, I'm gonna walk across it."

[audience laughs]

Justin: "[monotone] Don't forget to like, smash that like."

[audience laughs]

Justin: "[monotone] Hey, what's up, I'm here recapping my top ten Bubbly Creek fails."

[audience laughs]

Justin: "[monotone] The first one, I fell in a huge pile of dookie that was on fire. My boy Slammo filmed it, he thought it was hilarious."

Sydnee: [laughs] Is that what that Blippi guy does?

Justin: That's what Blippi does! And that's what Blippi does.

Sydnee: [laughs] But more importantly than how it looked really gross, um, that's not good for your health. [laughs] If the water is that—is that gross—

Justin: All subjective.

Sydnee: —and all that stuff is floating in it. Um, people knew better than to drink *that* water. Like, we didn't—we didn't know a lot about, like, germs and how diseases were spread quite yet at this point in history, but we at least knew enough to say, like, "*That* water is brown, and there are, like, sludgy things in it... and that looks like part of a pig. I'm not gonna drink *that* water."

So we knew that. But what we didn't quite understand is that all that stuff was going into the river, flowing down the river into the lake, where we definitely were getting our drinking water from.

And so, everybody was drinking the water from the lake, but it was being constantly polluted by the river. And as more and more people moved in, and there was more and more waste in the river, more and more was going into the lakes, people started to get really worried about this.

Um, at the time, there were already, like, yearly outbreaks of cholera, and typhoid, and dysentery. And while, again, people didn't quite understand all the connection as to, "What did I just do that made me so sick?" They knew something about the water was the problem, and they knew that the more of this stuff that was flowing into the lake, the more danger they were in.

At the time, you actually would buy your water from, like, a water peddler who would come door to door with, like, "I have fresh Lake Michigan water from you—for you! I tried to get it further away from the river!"

Justin: "Wink, wink!"

[theme music plays]

Justin: Hello, my friends! Uh, this is Justin McElroy, here. Sorry about having sort of two live ones in a row. I know that's not some people's favorite but, y'know, it's the holidays, y'all. But I hope you're enjoying the show for this week. I wanna take a quick break to tell you about our sponsors.

First up is Stitch Fix. If you, uh—maybe you're—you know, your New Year's commitment is to get your fashion right, to start caring a little bit more... uh, in my case it was at all... about the clothes that go on your body. And, if so, there's no better place to get started than Stitch Fix.

You can head on over to StitchFix.com/Sawbones. You answer some questions about your style and, uh, your size and stuff, and you'll have a personal shopper that's gonna send you a box of clothes, shoes, accessories. Stuff that is, uh, just selected for you.

And uh, and there's no commitment required. You get the box, you try the stuff on, you keep the stuff you like, send back the stuff you don't like for absolutely free. And if you keep everything in the box, then you get a discount, and that's extremely cool. So, the \$20 styling fee is also applied towards anything you keep for your box, so if you keep anything over 20 bucks, then, uh, y'know, that styling fee's gonna be waived, which is pretty excellent.

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Also, we wanna talk about insurance. Well, no. Nobody ever does, because it's dull, and not particularly fun to think about, y'know, things going wrong. But PolicyGenius does help to make it a little bit easier. It makes finding the right life insurance a breeze. In minutes, you can compare quotes from the top insurers to find your best price. You could save \$1,500 or more a year by using PolicyGenius to compare life insurance policies. Uh, and make it easy and, uh, help you get the right stuff.

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And, uh, with that, my friends... let's get back to the show!

Sydnee: So—and I should say, again, a lot of this was still based on the miasma theory of disease, and this is why the solutions they came up with at first didn't always make a lot of sense.

And the miasma theory of disease was that if something, like, smells bad, if there's, like, a gross thing there, then it's, like, emanating these fumes that will make you sick? And so, if you dump some waste in the river and it's just there, that's bad. But if you can just kind of flush it on down away from you, you're fine. [laughs quietly]

So, initially, the thought was, "Okay. We're gonna have to fix this. We need to get all this sewage that's just sort of, like, sitting out in the river around people where we're living. We need to get it away from us. How can we do that?

So they turned to a guy, Ellis Sylvester Chesbrough...

Justin: That's a name.

[audience laughs]

Sydnee: I knew you would enjoy that name.

Justin: It's very good.

Sydnee: When I found it I thought, "Justin'll love this."

Justin: I'm—listen, whatever this cat's planning, I'm in.

[audience laughs]

Sydnee: And—and his first idea seems kind of obvious. He said, "What about a sewer?"

[audience laughs]

Justin: Y'all hadn't...? Okay.

Sydnee: "Perhaps we should have one. I've seen them in Europe. They're fantastic." [laughs quietly]

Justin: "They're amazing. You know how we—"

Sydnee: "I helped build one in Boston. Let's get one."

Justin: "—you know how we put the dookie in the river? Get this: tubes for it."

[audience laughs]

Justin: "[distantly] But where do the tubes go?"

"I don't know."

[audience laughs]

Sydnee: Well, that's—we're gonna—

Justin: "They won't let me in the tubes in Europe. I just know there are tubes."

[audience laughs]

Justin: "And the dookie goes away."

Sydnee: We're gonna get to that. That was part of the problem. I just have to say, though...

[audience laughs]

Justin: God. Y'all...

Sydnee: I have to say, though, that when—this sounded very simple. "Well, we'll just go underneath all the roads and build pipes, and carry all the poop away from people's homes and whatever, and then we'll be fine."

Except they were depending on gravity to do the work, which meant that it had to flow down. But the town was, like, on the level of the river and the lake and everything, basically, so there was no gravity to work with. So Chesbrough said, "Well, I think we're just gonna have to raise the city."

[scattered laughter]

Sydnee: "Just, like, lift it all... up." Which is exactly what you all did.

[audience laughs and cheers]

Sydnee: Which is why they just raised the whole frickin' city! Like, anywhere from two feet to eight feet in some areas! Just, like, dredged up, like, clay and dirt from the bottom of the river and dumped it on the roads until it was, like, "Well, my bottom floor is now my cellar. [holding back laughter] I'm moving to the second floor, 'cause that's where the road is."

[audience laughs]

Justin: I now understand why y'all thought you could get away with mixing cheese and caramel popcorn together.

[audience laughs and cheers]

Justin: You spat—you spat in God's face and lived to tell the tale. [through laughter] Now you're cocksure and think you can handle anything.

[audience laughs]

Sydnee: [through laughter] I love it! The whole city is like an act of defiance in the face of nature, and I lo—I'm so here for it! I love it!

[audience cheers]

Sydnee: I love it! So they—so they raised the whole city, and they—and that must've been such a bummer if you didn't have, like, a jack under your house, which they literally did! They jacked up some of the houses, up to street level!

But—so they raised the whole city and they built the sewer, and they were like, "This is fantastic!" Except, where did the pipes go? [holding back laughter] Into the lake.

[audience laughs]

Justin: So it's kind of like a fun water slide for the dookie...

[audience laughs]

Justin: ... but the splashdown is the same place.

Sydnee: So then Chesbrough was like, "New idea. [laughs quietly] We're gonna build a tunnel... way down under the city, and it's gonna—and it's gonna go way out into the lake. Like, two miles out. And from there, we'll collect the drinking water. So, like, it'll—the drinking water will go in the—in the tunnel at this end, and flow all the way up to the city on this end. And so, all the pollution is going out right—you know, right where the river met the lake but, like, the drinking water's coming from out here, so we're probably cool."

So they did! Over the course of three years, they built this giant tunnel and got all the water from further out in the lake. And for a while, that seemed like a good solution. Everybody was like, "This looks good. The water's very brown here, but out there it looks pretty good. [laughs quietly] And that's where the tube is, so we're fine."

[scattered laughter]

Sydnee: But again, the city was growing and growing and growing, and the more people, the more waste, the more fear there was that that waste was getting pushed further and further out, the pollution was extending farther, and what if it was going to get in the drinking water?

And again, there were still these periodic outbreaks of disease. Um, especially after a heavy rain. And this is where the story gets... a little murky. So—[laughs quietly]

Justin: Ba-dum tsh.

[audience laughs]

Sydnee: So, in 1885 there was a huge rainstorm, and this part is definitely true. There was a huge rainstorm in Chicago, and the river flooded, and the lake flooded. There was just water everywhere. Way more rain than anybody predicted.

And the story that was told many, many years after is that, because there was so much extra water, and everything got shoved out towards the—the pipe where the drinking water came in that there were huge outbreaks of cholera and typhoid and dysentery following this giant rainfall, and that everybody got sick. Numbers like, 90,000 people died that year of these diseases.

And this is what—this—this event, and then, some more outbreaks that followed, really spurred this idea. Like, "We've got to do something else. There has to be a better way."

And back in 1871, Chesbrough had been really inspired by an accidental reversal of the flow of the river. There had been—they had been digging out a different canal, and they had added some extra water to the river, and they had accidentally, in this whole process, temporarily reversed the flow of the river.

And when he saw that happen, and everybody saw that happen just for a brief period of time, he, back then, had said, "I think our only solution is to change the direction this river flows. Because then we'd get all this clean lake water coming in, all the pollution would just keep on goin' downstream..."

Justin: "To somewhere."

[audience laughs]

Justin: "We have literally no way of knowing where."

[audience laughs]

Sydnee: "And then, all this stuff we're dumpin' in the river will be someone else's problem!" Namely St. Louis. It would—[laughs quietly]

[audience laughs and cheers]

Sydnee: It would be St. Louis's problem, is—that's... uh, and so, because of that happened years ago and, like, Chesbrough had suggested it. Even though at this point he was no longer—actually, by the time this project starts, Chesbrough has died. His idea lives on—

Justin: [simultaneously] There she is! There, you got him, Syd!

Sydnee: No! I just—

[audience laughs]

Justin: Sydnee likes to follow everybody's historical story until they meet their maker. I don't know why, but... we got him!

Sydnee: I mean, did you think he was still alive?

Justin: No, I'm just glad we can hit—

Sydnee: We're in 1892 right now!

Justin: You just don't let anybody fade away back into the history books. You know what I mean? Like, "Well, I've done my part." You have to walk 'em right to their grave!

Sydnee: Well, it was even—

Justin: Push 'em right in!

Sydnee: —but after his death, his idea lived on. And in 1892, they began the construction of a canal. The idea was that we're gonna connect the Chicago River to the Des Plaines River, and when we do that, all the water's gonna start flowing that direction and eventually join the Mississippi River system, and this is great. And instead of us contaminating our own drinking water, we're just gonna be... [through laughter] Making things really bad.

[audience laughs]

Sydnee: For everything downstream! And we don't care about that, 'cause we live here. [laughs]

[audience laughs]

Sydnee: And so, they began building the Chicago Sanitary and Ship Canal. And it would take a lot longer than they expected, for a couple reasons. First of all, like, it was really hard... to do that? They had to, like, dig a *lot*? They had to, like, invent, like, steam-powered, y'know, digging machines to do that. The technology that was created for this project was actually all used years later for the Panama Canal. This was all, like, the foundation for the building of the Panama Canal. All that technology was developed.

Um, so that would, like, slow things down. But the other reason is because cities downstream hearing about what Chicago was doing were like, "Uh..."

Justin: "Can you not?"

[audience laughs]

Justin: Yeah. Chicago had to throw a huge blanket over the whole thing every time St. Louis came by. Like...

[audience laughs]

Justin: "I hear a *lot* of digging."

Like, "No, I don't think so. I don't know."

Sydnee: So it became a court battle. Uh, where St. Louis was like, "Umm... I don't think—we don't—we would rather you don't do this." And Chicago was arguing, "Listen. Uh, the pollution—"

Justin: "Free water!"

Sydnee: [laughs]

[audience laughs]

Sydnee: They were arguing that—well, one, they did argue, like, we're gonna have this influx of all this clean lake water, so that's fine. And—and it's gonna get down to your city eventually, so that's good.

[audience laughs]

Sydnee: [holding back laughter] Uh, and two, the pollution is gonna be so diluted, you won't even notice it. [laughs quietly]

[audience laughs]

Sydnee: It's like it's not even there. They actually—that was the—that was their rallying cry. The solution to pollution is dilution.

[audience laughs and cheers]

Sydnee: We'll just dilute the waste out. And St. Louis was arguing, like, "Okay. I don't know if that's true or not, but even, like, diluted human feces is not... great."

[audience laughs]

Sydnee: "So could you keep that in Chicago, please? Thank you."

And it was moving very slowly through the courts. Like, St. Louis had actually gone to the Supreme Court and said, like, "Could you please stop them? They're just—they're digging and digging! And eventually this is gonna happen, and—"

Justin: "Please—"

Sydnee: "—someone please stop them!"

Justin: "Please, reason with Chicago!"

[audience laughs]

Sydnee: So in 1899, they specifically went to the Supreme Court and asked them for an injunction. And even though it was moving slowly, there was a lot of fear by the end of the year that the court was actually gonna hand down at least a temporary injunction to say, like, "Let's look into this a little bit more."

Justin: And halfway rerouting a river is nothing. Like... if you halfway turn a river the other direction, you haven't done anything, really. It's just stopped.

Sydnee: [laughs]

Justin: It's a skinny lake.

[audience laughs]

Sydnee: But Chicago knew they had to act fast. They had to reverse this river, because by the year 1900, Chicago had over, like, a million and a half people living here, so it had grown very large, and the river was *very* gross, and something had to be done!

So before the courts could decide one way or the other... [holding back laughter] On January second of 1900, in the early morning hours... this was really how this was done. A group of people from, like, the sanitary district in Chicago and some of the engineers and, like, government people and, like, their wives and friends... went down to the last dam. The last dam that was holding back the river that—

that—before it joined the Des Plaines. They went to the dam and decided, "We're gonna break it down ourselves."

[audience cheers]

Sydnee: "We're gonna do it. We're not gonna announce it. We're not gonna tell the press." They had, like, one photographer there. They told, like, one guy. Like, "Listen. We're gonna give you the exclusive, but *don't tell St. Louis.*"

[audience laughs]

Justin: "Don't—don't put it on Instagram. You know they'll see it."

Sydnee: "'Cause they'll definitely come stop us, 'cause this isn't strictly legal."

So they went, and it took 'em—it should be, like, really cool. Like, they showed up and they—they went at it at first just with their shovels. They were like, "Yes! We're doing this! We're reversing the river!"

That didn't work. The shovels didn't work. It was very cold. There was lots of ice. There was, like, clay. I mean, it was hard to break through the dam and everything. So they tried with shovels for a while. They tried with their big steampowered machines. None of this was working very well, so eventually they had to start throwing dynamite at it.

[audience laughs]

Justin: There it is.

Sydnee: [holding back laughter] It took quite a while, but they did, indeed, break the dam. And they reversed the flow of the river.

And so at that point, even though Missouri is still fighting this and, like, trying to get the Supreme Court to do something, the river is now flowing the other direction.

[audience laughs]

Sydnee: So it's gonna be a lot harder to stop. And it wasn't even until 1906, so six years later, that finally the Supreme Court kind of weighs in, and—[laughs quietly]

[audience laughs]

Sydnee: [laughs] And Justice Oliver Wendell Holmes says, "Eh, I think it's fine. Um..."

[audience laughs]

Sydnee: [laughs]

Justin: "It's been six years. Who remembers what direction it was going in the first place?"

[audience laughs]

Sydnee: He said—he said, "Look. Uh, I've looked at the Mississippi, and you're right. It's nasty. So, uh, maybe that did happen because of what Chicago did. But there are also a lot of other cities dumping their waste into the river, so we can't blame it all on Chicago, so... I don't know. And maybe all that lake water is a good thing, really!"

Justin: If I was the judge I'd be like, "Listen. If you're so mad about it, why don't you do like Chicago did... and make it go the opposite direction?"

Sydnee: [laughs]

[audience laughs]

Sydnee: [through laughter] Back to Chicago.

Justin: This is how—this is how we handle river law in America, now.

[audience laughs]

Justin: Is just who's—who can—who's the toughest? Who can make the river flow back at the other people? This is—it's chaos out there.

Sydnee: [through laughter] I have to imagine the fact that, like, they'd already done it, weighed heavily on this decision. Like...

Justin: Right.

Sydnee: So, uh, they—so the river now flowed the other direction. There was definitely a noticeable difference pretty quickly in just, like, the appearance of the river, 'cause everything was going down to St. Louis now. [laughing] It was their problem. Uh, they, uh—they, of course, had to take other measures over the years to, like, eventually stop dumping, like, raw sewage into the river. 'Cause that's a bad idea, even if it is going to St. Louis.

[audience laughs]

Sydnee: You don't wanna do that. Uh, but, it was touted as one of the greatest, like, engineering achievements in the history of, you know, mankind, as we reversed the flow of a river. Um, now, my understanding from reading a lot about this is that it has created some problems now, other than the whole thing about making St. Louis your toilet. [laughs]

[audience laughs]

Justin: [laughs]

Sydnee: Which was not very nice. Uh, it has allowed for, like, invasive species like Asian Carp are now coming in and, like, I guess a lot of money is spent trying to keep those and, like, zebra mussels out of the Mississippi River system. So there are other problems. And I even read, like, somebody suggesting, like, maybe we should flip it back.

[audience laughs]

Sydnee: [laughs quietly] Which seems like—well, that would probably be a lot easier now. Um, but the real kicker to this whole story is that a lot of it was based on this idea that so many people were dying of these infectious diseases right before the river reversal that there was no other choice. You just had to do it, right? It was for the good of the people of the city.

And, like, there's even, like, a story that goes with one of the guys who was, like, sitting there hammering away at the dam with a shovel was, like, crying as he watched the water finally break through because he lost both of his parents to cholera, and so, like, he's finally, like, stopping the scourge of these diseases, and... So it was all this very, like, you know, like, "We have to do this for the people of Chicago."

But the—the real kicker is that that big outbreak of cholera and typhoid and dysentery in 1885 that killed 90,000 people... never happened. It is completely a myth.

Justin: Y'aaall...

[audience laughs]

Sydnee: There—

Justin: Did you just really hate St. Louis?

[audience laughs and cheers]

Justin: That's, like, the meanest—

[cheering continues]

Justin: That's, like, such a mean prank to do!

[audience laughs]

Sydnee: I mean, there definitely were cases of it. I'm not saying nobody got cholera, but if 90,000 people had died at that point, it would've been, like, 12% of the population? There would've been some news stories... you would think. One or two. And in all honesty, there were actually fewer deaths that year of those diseases than in typical years. [laughs quietly]

[audience laughs]

Justin: Oh, no...

Sydnee: Uh, the last big outbreak of cholera had been back in, like, 1867. There really wasn't a big one since then, and typhoid deaths were about the same every year. So these were problems, and getting clean water, of course, was very important, but this huge outbreak that, like, had to spur everybody to action is completely false. It's, like, such a big myth that there's, like, [holding back laughter] an entire Wikipedia page dedicated to "The Myth of the Chicago 1885 Cholera Outbreak."

[audience laughs]

Sydnee: Uh, that never happened. That didn't happen. I guess it came from—like, in the 1950s there was some other sort of, like, river project that people were trying to get pushed through. And there was some resistance and they were like, "Well, we don't wanna face another situation back in, you know, '85 when, like, mmm... like, 90,000 people died or somethin' like that? Remember that?"

And everybody was like, "What?!"

[audience laughs]

Justin: "Huh?!"

Sydnee: And there was no internet, so nobody could check! And everybody was like, "Did you hear that? Did you know that? I didn't know that."

Justin: "I missed it!"

Sydnee: No.

Justin: "I thought I heard about a lot of people dyin', but I just assumed... wow."

Sydnee: There's a—it—I found all of this fascinating, and if you do too, there's a great book that I've read quite a bit of just to do this episode called The Chicago River: A Natural and Unnatural History by Libby Hill, which is a—if you're interested in this, it's a fascinating, book, so...

Justin: Yeah.

Sydnee: I just had to mention.

[scattered cheers]

Justin: It's okay, too, if you feel too guilty to read it. 'Cause you're like, "Sorry my grandpa made up the cholera."

[audience laughs]

Justin: "Sorry about all our grandpas." [snorts]

Sydnee: [laughs]

Justin: Um, thank you so much for having us here in your beautiful city, Chicago.

[audience cheers]

Justin: I say—I say leave the river however it is. You all broke down the dams. It's your river now!

[audience cheers]

Sydnee: Thank you also for having—

Justin: Did this dam belong to St. Louis, too?

Sydnee: [laughs]

Justin: Aw, man! Guys! Our dam!

Sydnee: Thank you for also—you all have the best children's museum that, at

least, I have been to.

Justin: Oh, slam dunk.

[audience cheers loudly]

Justin: Slam dunk, and a very good Margaritaville.

Sydnee: Yes, yes, yeah.

[audience laughs and cheers]

Sydnee: We—and we go to a *lot* of children's museums. [laughs] So—

Justin: All of them.

Sydnee: Yes, all of them. So...

Justin: Thanks to The Taxpayers for the use of their song Medicines as the intro and outro of our program.

[audience cheers]

Justin: Um, we are, uh, gonna do [stammers] My—my—my—my br—[blows raspberry] Y'know. The advice one.

Sydnee: [laughs]

Justin: Uh, here in a second. If you have questions that you'd like us to answer, you can send those to live@mbmbam.com, and in the subject line you're going to put your name and seat number, and in the body, one sentence question. Uh, advice, please, that we can help with. And, uh, we'll—we'll, you know, bring somebody up to the microphones.

Uh, that is going to do it for us for this week, Sydster. So, until next week, my name is Justin McElroy.

Sydnee: I'm Sydnee McElroy.

Justin: And as always, don't drill a hole in your head!

Sydnee: Thank you!

[audience cheers]

[theme music plays]