One Foot in the Black: Part 1 – Why Are Oregon's Skies So Smoky?

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Kyle Williams: I was down there, 18 years old, first training burn. We were burning somebody's, you know, clear cut, whatever. And this giant stump, I remember this very distinctly. I was down on the, holding the bottom line, this giant stump comes rolling off the top of the unit, bounding its way down the hill, and I moved about 10 feet to the left and forgot the chainsaw that I was working, set it down and walked 10 feet to the left. And that stump center-punched that saw, blew it up. $450 still chain saw, disintegrated. I'd been on the job for like four days. I went, well, maybe I won't last after all, like Dad said.

Chris Edwards: Welcome to Forestry Smart Policy, a podcast produced by the Oregon Forest Industries Council for policymakers and other thought leaders influencing decisions in Oregon. I'm Chris Edwards, your host and president of OFIC. In this episode, I sit down with Kyle Williams, the director of forest protection for OFIC. Kyle is one of Oregon's preeminent experts on all aspects of fire, from suppression and initial attack to funding Oregon's complete and coordinated system and what makes that system the envy of all other states. Kyle started his career as a firefighter for the Oregon Department of Forestry and worked his way up through the ranks there for 14 years before moving to the private sector, initially to train foresters on the Forest Practices Act and then later as a harvest supervisor for a private timber company. He started at OFIC in 2018 as the Director of Forest Protection. Kyle describes his job as the steward of Oregon's complete and coordinated fire system, making sure the system is adequately funded and OFIC's members are fully engaged and invested in helping put fires out. Kyle is also an expert at deciphering and interpreting how policy concepts would impact the fire system in Oregon. In this first episode of our two-part series, Kyle answers the question, why are our skies so smoky these days? Then we talk about the differences in land ownership types and fire suppression tactics, what role fire suppression and active management play in the bigger wildfire equation, and conclude with what we can actually do about the problem. Along the way, Kyle also debunked some common myths about the 2020 Labor Day fires, such as the ability of old growth to be more fire resilient, and the timber industry's so-called, quote, desire to log the back country. Without further delay, here's my discussion with Kyle Williams.

Are we rolling? Cool. Kyle Williams, how are you?

Kyle Williams: I think I'm okay.

Chris Edwards: So, the OFIC podcast, the inaugural episode. The wildfire. We chose wildfire because it is important to talk about. But first of all, why should we be talking with

you about wildfire? So, I know why I'm interested in talking with you about wildfire, because as far as I'm concerned, you're top five, top five in terms of most knowledgeable Oregonians about wildfire. Everything from how wildfire behaves to how it is suppressed and how that suppression is funded here in the state of Oregon. But let's go back to the beginning. What was your first experience with wildfire?

Kyle Williams: Yeah, good. So, first of all, I appreciate that opinion. Top five's not bad, I guess. There are a lot of folks.

Chris Edwards: If it would make you feel more comfortable, we could make it 10.

Kyle Williams: Let's go top 10. But there is a lot to that, like you said. There's a lot of elements to... Specifically, this role is the Director of Forest Protection, right? And you got to know the numbers behind the fire protection system, kind of how it works, and thinking around the corner. So, anyway, hopefully I'm halfway decent at all that. But to your second question there, the first experience in fire? This is actually kind of funny. So, I was 18, and I was a freshman at Western Oregon University in Monmouth. And I went there to be a history teacher. This was before I knew what it would be like to try and deal with other people's kids. And I met a guy there at Western. He'd been fighting fire down in Florence, Oregon, which is not a place that you really think of for fighting fire. But anyway, he introduced the concept, hey, we don't have enough guys for our crew this summer. It's a pretty sweet gig. You ought to come check it out. And I was a garbage man at the time. And let me tell you about making real money when you are an 18-year-old kid. That's a garbage man gig. It was awesome. But it seemed pretty interesting. And as I was going through my freshman year on this endeavor of being a history teacher, I started to really quickly realize, that's not going to be very good for me. Because I was outside every day. I wasn't going to a whole lot of class for other reasons. And it was pretty apparent to me that that was not going to be my logical path. And now I was lost. I didn't want to be a garbage man for the rest of my life, although sweet gig, like I mentioned. So what can I do outside? And here comes this fellow, Bruce. He says, let's go fight some fire. I remember going back to my parents, and I said, I got a brilliant idea. I'm going to go fight fire this summer. And my mother, first grade teacher her whole life, she says, no, you're not. Well, yeah, I am. She says, no, you'll get killed. I said, well, there's lots of stuff out there that might do that. I really want to try this. Then my dad, he says, Cindy, you've got to let him try. He won't last very long at this. And I thought, man, maybe I won't, but I'm going to go give it a go. And so I was down there, 18 years old, first training burn. We were burning somebody's clear cut, whatever. And this giant stump, I remember this very distinctly. I was down holding the bottom line. This giant stump comes rolling off the top of the unit, bounding its way down the hill. And I moved about 10 feet to the left and forgot the chainsaw that I was working. I

set it down and walked 10 feet to the left. And that stump center punched that saw, blew it up. $450 still chain saw disintegrated. I'd been on the job for like four days. I went, well, maybe I won't last after all, like Dad said. The only thing that saved me was Florence, Oregon. There was like five kids that were even breathing, walking, able to pass the, you know, all that kind of stuff. And I was one of them. So they couldn't get rid of me. Hung around there and ended up moving through the system at ODF and just fell in love with it. And subsequently, as I went through school at Western, it kind of saved me. Because when you graduate with a geography degree from Western Oregon University, it turns out you're not very marketable in terms of the geosciences. So I had a backup plan, and that was go be a firefighter forever. And so when I graduated, I started applying for permanent jobs at ODF and caught on at Toledo, which is also not a place that's traditionally thought of as a high fire load unit, which, again, was to my benefit. Because there was only about three of us that applied for the job, so one thing led to another.

Chris Edwards: So OK, then I'm going to ask you the overarching question that I get from people that don't work in this sector, my friends from high school that I go backpacking with every summer, people that I know, will say to me, because they know that I work in the sector and I work on public policy, they say, Chris, I don't understand why the skies are so smoky every summer. Now, it wasn't that way in Eugene, Oregon, where we grew up, when we were kids in the 80s or the early 90s. I mean, you might have some fires, but the whole valley wasn't socked in with smoke for weeks on end. So what's going on?

Kyle Williams: Yeah. That's, first of all, an accurate observation. It wasn't that way in the 80s and 90s. Throughout Oregon. And I think there's a key piece here that's important for setting the base of understanding of this. And that's roughly 80% of the acres that are burning across the state, timberland acres that are burning, are on federal lands. And that sounds like a, it sounds like a, you know, oh, those guys are bad over there. But there's a lot of reasons for that, too. So that's one base level of understanding you have to get to, is the vast majority are burning on federal lands. And there's a management component to that. And the reason you didn't see that smoke in the 80s and 90s was because they were still actively managing those lands, right? I mean, Chris, you grew up in a mill, right? I would imagine that a fair amount of that volume was coming from federal timber sales, right? And the mills around you, right? My wife grew up in a town, Reedsport. There was three mills around Reedsport. That was largely federal timber that was feeding those things, right? And then in the mid-'90s, with Spotted Owl and the Northwest Forest Plan, they dumped. And you can see those, the volume metrics tell the story of the management that was going on at the time, right? The road access, right? Having loggers out in the woods that would identify when there was a fire at 10 a.m. and being able to go put it out quickly. All of that was happening in the 80s and 90s. And then it stopped. Overnight, it stopped. And

everything started growing and growing, okay? Fast forward to now. So you've got all that fuel out there. The next component is climate, frankly. I mean, we are warmer on an average basis than we were in those 80s and 90s, and certainly the 50s, 60s, and 70s before that, right? So from a table setting perspective, you've vastly increased the fuel loading on our federal lands, which is half of the timbered lands in Oregon, right? 16 million acres are federally owned, roughly, more than that. And about 16 million are, well, a little less than that are privately owned. So you've got all this fuel, you've got a warmer climate, and then you've got a whole complicated environment of suppression that's going on in the federal agencies, where they're not as able to engage for a variety of reasons as they used to be. And some of that's access, some of that is risk tolerance, some of that is liability concerns. A lot of that is self-induced contract obligations that make it harder for them to utilize certain resources. So it is not just one thing that leads to that smoke that your fine backpacking friends are encountering. It is kind of a systemic building of a few components.

Chris Edwards: So what about the role of fire suppression? That's a popular talking point that after decades of fire suppression, the fuels have built up. And it seems like, okay, so we've got active management on one side and fire suppression on the other side. I'm just trying to make sense of how this all comes together.

Kyle Williams: Well, the first piece, fire suppression on, and I think when you were referencing sides, it was kind of private lands and federal lands. Fire suppression, certainly on the private side, is still full speed go, zero tolerance for fire. There is a state law that said fire is a nuisance in this state. You are not allowed as a private landowner in this state to have fire on your property unabated, which means not immediately attacked and put out. So that's the first piece. Private lands, we are still full tilt. Let's get the suppression. So there is no doubt about it 200 years ago in this state that when wildfire... Think about our summers. We always have lightning, tons of lightning. Lightning strikes everywhere. We average about 1,000 starts a summer in Oregon across all jurisdictions. Think about before there were 4 million people in this state, those lightning strikes could happen. They would burn up a few thousand acres. They would hit last summer's fire scar, and they would go out. Well, now we are stationary in terms of our...

Chris Edwards: Right, where we're living. You can't just pick up your house and move it. And so you can't just let that fire burn in the way that it naturally used to occur.

Kyle Williams: And so anyways, that was 200 years ago. And then, well, I guess it would be 130 years ago, turn of the century, right? We started realizing there was value in this wood out there, and we started logging it and, you know, reducing the fuels artificially with air quotes around it, right? It's not fire anymore. It's us out there, right? We are manipulating

the fuel beds, okay? And so at the same time, we were putting fires out that would be costing us that timber. We were taking care of that fuel loading by hauling it off the hill or turning it into the spruce goose, you name it, okay? Advanced that then through the last century, and the climate was beneficial, right? It was on average cooler and wetter than past centuries, and certainly than we are dealing with now. And you still had tons of loggers out there, and you still had tons of access, and you still had all the things that kept your fires put out, okay? And then we get to what we just talked about. The last 30 years, we stopped doing any of the artificial fuel modification on our federal lands, and we kept putting all the fires out. Boom. You end up with this giant potpourri of fuel out there on the landscape. Now, the difference on private lands, when we talk about that, we've always been putting out the fires, but what did we not stop doing? Active management, right? We continue to modify our fuels through our thinning, logging, burning, you name it. So then on private lands, we still have a chance when you get, right? Because half of the fire starts, oh, I guess I should take a step back. We average about 2,000 fire starts a year in Oregon, and 1,000 of those are on private lands, 1,000 are on federal lands. Same exact number of starts between private and federal lands. Roughly equal acres, less than 20% of the acres burned on private lands, right? Because we can get to our fires. When you do get there, they're probably burning in a place that you have modified the fuels at least in terms of removing logs, right? You burned the slash off of the hillside. You can get at that fire. The helicopters can get at that fire. The firefighters can get at that fire, right? You've broken up the fuel loading because you've got maybe a 40-year-old timber patch over here, moves into a 4-year-old regeneration stand over here, moves into a 60-year-old timber patch, moves into a buffer over there. Our landscape is such that we have opportunity to fight the fires. So we continue to do that kind of artificial modification. That's the big difference. It's not just that we've been putting fires out for an entire century. There's more to it than just that.

Chris Edwards: Yeah, I want to go back to what you said about fire suppression on federal land. You mentioned access as one of the key components. Could you expand on access?

Kyle Williams: Yeah, and there's no better way around it. Roads equal access, right? And when you are actively managing your landscape, i.e. you've got to go put 100 acres of a thinning out on that ridge, you need a road to get your loggers and your foresters out to it. That road is then there when you have a lightning strike on that same ridge. You can drive your engine, pumper truck, however you think about it in your mind's eye, within 100 feet of that fire start, drag the hose off of it and put that thing out when it's campfire sized, right? What started happening on federal lands was they couldn't even do that thinning, so then they didn't need the road, so then it grew in, so then when the lightning strike hits out there on the end of that ridge, two miles from the nearest access point, are you dragging 100 feet

of hose and putting it out when it's campfire sized? Or are you having to cut your way, hike, pack, you and maybe four other firefighters get out there two hours later, and that thing's an acre in size, and you don't have any water, you've just got the tool that you packed in there with you. Kind of, I, maybe, but you know what messes with Croner's Day? It's burning up his house, right? Let's just call it what it is. It's not that complicated, right? And so, you're just transferring. It's just this giant, I don't know.

Chris Edwards: Well, so that, so, okay, there's several things I want to follow up on there. So you're talking about direct attack, the ability to go in direct on the fire. So if they can't go in direct on the fire, because that road network is there, then what are the alternatives? What does the Forest Service use now for a strategy?

Kyle Williams: Well, it's okay. So that's a key component of this, and I think it's worth people understanding. The way you fight fires, especially in Western Oregon, is by putting water on them, or removing fuel from the path of where the fire's going. And so there's two ways to do that, obviously. Again, to the engine or the helicopter, put the wet stuff on the red stuff, fire goes out. Unfortunately, once those fires get established, right? So again, we go back to that example of two miles out the ridge, and you weren't able to get there and put the wet stuff on the red stuff when you could keep it small. Now you've got to wait for an opportunity to take the fuel away from that fire. So you're looking for maybe the next ridge over, and if that one doesn't have a road or you don't have time to put what we call a line in, which is where you take your chainsaws and your tools and you dig it down to bare mineral soil and create that fire break, right, to take the fuel away from the fire. If that next ridge doesn't have a road on it and you don't have time to get to it, well, then you've got to go to the next ridge over from that. And that one didn't have a road either because we decommissioned it in 1997 and we felt really good about ourselves, but shoot, wish we had it. Anyway, we'll go to the next ridge. And pretty soon you create this circle around what is that one acre fire you couldn't adequately get to at initial attack. You're like, well, shoot, this circle is 10,000 acres now. I sure hope the wind doesn't blow really hard in the next seven days as we wait for the fire to get out to these ridges, right? And that's where we're at right now on the federal landscape. They've got to get out to those ridges that might have roads on them, opportunities to create fire breaks, fuel breaks, whatever, however you want to refer to them. And then you kind of just hope and hope and hope that that fire behaves as you backfire off those lines. Anyway, I don't want to get it too complicated here, but that's how they have to fight fire on that federal landscape now, because A, they can't get to it at initial attack, which is that very first phase, and B, they can't get close to it after that, so it's got to grow. And you're just praying that that east wind event, Beachy Creek, Chetco Bar, Cedar Creek, right? You're praying in the interim that your fire grows out to your lines before

something really catastrophic happens. And frankly, hope is not a strategy. I learned that from Jack Dunway, too.

Chris Edwards: So they're not able to keep the fire small, so they're just letting them go, and then hoping that they don't get too big and out of control, spread by a wind event, in which case that perimeter that they've established might not hold anyway.

Kyle Williams: Right, yeah, because I do hear the, so they're just letting it go, and I just want to provide a little clarity. It's not entirely true, because they are brushing the heck out of that road that's on the perimeter of that 10,000 acres, to the point you just made, right? They're hoping those lines hold when the fire gets to them. So the action they are able to take is very outside the perimeter of that fire. But they're busy, they're doing stuff. It's just largely not very successful. The best way to fight a fire, I should leave this, and hopefully this point makes sense. This is an ODF principle. It's the very first thing I learned after Take Your Chainsaw With You When You Run Away From the Stump. One foot in the black, okay? So think about that, right? The fire's burning, and it feels like it's burning really hard, but on most days, those flame lengths come down four feet, right? Two feet long, four feet tall. You can get pretty close to that. Throw a little bit of soil at it. It'll calm down. You got one foot in the black. You're building that fuel break right along, adjacent to those flames. Fuel goes out. It's small. It's done, just like that, right? So up close, up tight, that's how ODF fights fire. And that's how you get in, get out quick, right? But they cannot do that right now, given the fuel loading and the landscape they've got on federal lands.

Chris Edwards: So what about risk tolerance? You mentioned risk tolerance as well. How does that play a role in fighting fire on federal lands?

Kyle Williams: Yeah, that's important, okay? So we've got, especially in western Oregon, Cascade Crest, right? And southwest Oregon, too. You've got this decadent, the term is decadent, right? It's an old, it's not old growth, it's an older tree that's out there on the landscape, okay? 100 to 200 years old. Trees don't live forever, contrary to some belief, right? And most of those 100 to 200 year old trees have some kind of conch disease, tops busted out of them, right? They're all getting old and breaking apart. So when you go out and you've got a fire in a landscape like that, right? You've got, think about this, you guys, everybody that's listening to this right now has been out in western Oregon woods, right? You've got Salal and Oregon Grape and Brush generally that's like eight feet tall out in this landscape, and then you've got these 60-inch trees busted out top. You've got then a log that fell down, and it's in front, right, this massive fuel loading. You can think about it as like going into, I don't know, a junkyard and trying to, you know, walk in a straight line through that thing. It's just not going to happen, right? So you're out there in that landscape, and at any given time, with the wind blowing in the summer and fires burning all around you, a

limb, a tree, you name it, is going to fall out of there and could potentially strike a firefighter, right? It's a very dangerous place to fight fire in those landscapes. So the way you can mitigate that to some extent is take that step back, right? Get to the road where it's a little bit cleared out. It is a transference of the risk. You're thinking, you know what? Instead of being right next to that thing, I'm going to step back over here, and it's going to take me an extra two weeks, but this will, by gosh, be safer. Unfortunately, recent fatalities in Oregon have all been out there on those roads as they've been brushing those. So it may not be quite as clean cut as you think it is in terms of which one's safer. The difference on private lands is you don't have that messy landscape, right? You don't have those busted top trees. When we have a fire come through, we are clearing those burnt trees off the landscape, planting new ones, getting them growing again, and that snag hazard doesn't exist there for the next firefighter. I remember this very vividly. I got sent to a fire on federal lands, and I walked out there, and I went, oh my, I've never seen anything like this. It was just a snag patch. It was all these gray ghosts for miles. And I'm like, you want me to walk? I don't think I want to walk in there, right? And neither do the forest service supervisors want to send kids in there now, right? It's just not a safe environment. And so that's what I'm talking about in terms of that risk. You add on to it some things like the 30-mile fire, which put liability for something bad that happened. It was a poor decision, but liability for something bad that happened on a fire, on a fire supervisor, they started to go, whoa, in the course of my job, I might be liable for somebody getting hurt or burned over. Yeah, I don't want to put anybody down there. We're just going to fight this thing from back here. And so that liability culture has also impacted heavily what's going on in federal landscape and federal decision makers.

Chris Edwards: Wow, there's so much there that I want to follow up on. But I'm going to move this conversation along. So I guess my next question is, what do we do about this situation? Because it feels like we're at the mercy of the federal government, the mercy of federal forest policy, the mercy of forest service management. What can we do?

Kyle Williams: Yeah. Well, I think the first piece is a recognition that relying on all of those elements you just talked about to solve it by themselves is not realistic, right? I mean, this has got to be in all land. I'm going to use air quotes and agency terminology, so bear with me. But it has to be in all lands, all hands approach, right? We have to figure out a way to work with the federal system to help them be successful. And that looks like engaging in cross-boundary partnership stuff. That looks like tactically looking at the landscape and going, OK, pre-fire, where do we need to establish some of these containment lines? Go out and get those ready to go. And then it comes to treating that landscape. We talked in the very beginning about the primary driver here is the fuel loading in a drier environment. So what can you control in that? Can you control the drier environment? Not immediately.

There's lots of ideas out there. I'm going to leave those alone. But you can modify that fuel. And so that's actively managing that landscape on the federal lands. And so it's doing everything you can to get those projects going. The other piece, so it's kind of a three-legged stool here when you look at how you do this. So they call it creating a resilient landscape through fuel treatment. So thinning and prescribed fire on those lands to reduce the fuel. Next one is getting the communities ready. We also talked about we are a Mediterranean climate, mid-latitude climate, whatever it is. Fire is the thing that happens here. So four months out of the year, we are a ready-to-burn fire environment. They are going to happen despite anything we talk about here today. So have your communities ready for those inevitable fires to burn. And that means defensible space around the homes. That means some resilient building materials. So it's not a cedar-shake roof with a tree growing over the top of it, buried in the brush in southwest Oregon. That's not realistic. So you've got to treat around the communities and prepare them for that. And then it's aggressive suppression during the time of year when fire is dangerous. And that's pretty simple. We know that. It's right that mid-June to mid-September. Don't play with your food. Go put those fires out. Be aggressive. Be adequately prepared to do that. All that kind of stuff. And so that's how you move this thing forward. And can you do it like that? No. It took us 30 years. It took us that long to get the fuel loading right where it's at right now, and longer than that even. We can't just say, well, you know what we ought to do is something about that fuel, and by this time next year, we're going to have it solved. Now, we're talking about millions of acres that need treatment. And you don't have to treat all 16 million acres, right? Not at once anyways. But if you strategically start looking at that landscape and prioritize, okay, this ridge needs to be treated. It ties into that ridge. It ties into that ridge. Pretty soon you've got a place that you can deal with your fire, and then you build out from there, right? It's a slow Titanic to turn, but that's how you've got to start doing it.

Chris Edwards: So what does that treatment look like? Because I hear a lot about using fire to treat the landscape. But as you and I have spoken about before, you've said, well, not so fast. You can't just light a match to it.

Kyle Williams: Yeah, that's right. So what does treatment look like? And this is an important clarification, because you will hear they just want more logs from the back country. That's what they mean when they say treatment. Trust me, that's not true. What we're talking about is reducing stems per acre. So imagine a given acre of federal land might have 600 trees per acre on it. And that's going to be hard for some people to think about. But that's like less than every 10 feet by 10 feet, there is going to be another tree. They are packed, stacked on top of each other. So you then clear that down to something that looks more like maybe 200 trees per acre. And so now you're standing, think about in your mind's eye, you're standing in kind of a beautiful sort of meadow where you can see a

little bit. And those trees are 20 feet by 20 feet apart or 30 feet by 30 feet apart. You're breaking up that crown continuity. You're breaking up that fuel at the surface continuity and making it so that a fire will stay on the ground in there. It's not a flattened earth at all. That's not what we're talking about in the context of federal land. Because if you were to light that land, that ground prior to that treatment, it's going to go off like a bomb. And you aren't going to be able to control it. The time of year when you will actually be able to get that thing to start, you won't be able to control it. Yeah, the ladder fuel is what we're talking about. Because that brush will then burn up halfway up that tree, then to the crown, and then that crown touches this crown, and whoosh, everybody's gone. So you go in, you treat that landscape ahead of time. Treat, i.e. remove those stems per acre, and then you either deal with that material somehow. And that's usually followed up by burning it, or trucking it to town, or whatever you call it. And then you've got a scenario where you can put fire on the ground. At the time of year, you can control it. You take care of, so whatever's left over, you clear that off there. And you've reduced now, there's a lot of really cool studies coming out, and I would encourage people to go look at what's happening. But you've taken potential available fuel load from, let's just use any number so that it's easy to talk about. Let's call it 100 tons per acre of available fuel prior to your treatment. You bring that back down to 20 tons per acre post treatment and fire. What do you think that does in August when a wildfire is burning through there in terms of the energy that is released from that acre and a firefighter's ability to go do something about putting it out? It is the key component in terms of getting that thing controlled at that part of the year.

Chris Edwards: Yeah, so fires that are burning with that higher fuel load on the landscape, they're burning hotter, more energy, and more likely to moonscape, or leave the land moonscaped, so to speak. Is that accurate?

Kyle Williams: You've got a few different versions of fire. What you're talking about is a stand-replacing fire. That's where you burn from that brush component on the ground, the ladder fuel up through the canopy, take out that entire thing. That whole regime is gone. No more brush, no more tree, no more canopy. We're toast, and we did that across 50,000 acres when the wind was blowing bad one day. That's a stand-replacing fire. What we're trying to recreate is kind of an analog to that 200 years ago when that fire would burn through that stand and stay at that four-foot flame length, right, down on the ground where it's clearing off the brush, where some of the younger trees will survive because the intensity is just a lot lower in that scenario. That is a resilient landscape. That tree is going to be there, right? The Western native species have all adapted to natural fire.

Chris Edwards: Yeah. I've spent a fair amount of time backpacking in landscapes that had both types of fire scenarios. Fires that had just been stand replacement, there's nothing

there. There's no shade. There's very little ground cover. Pole Creek Fire out of Sisters is one example. Last summer, we were backpacking through there, and it was hours upon hours of walking through just sun. And 10 years later, a little bit of Manzanita is coming back. But there's very little ground cover. It's super exposed for erosion. And I remember one of my friends asking me, he said, well, why don't they replant? So that's in the Three Sisters Wilderness. That's a completely different podcast episode about a federal forest policy. But I've definitely experienced that. But then I've also been through a forest where you see black up the tree, and it's kind of park-like almost.

Kyle Williams: I give you two examples. And I think if somebody is from Oregon, been here any amount of time, you've probably driven Highway 20 over to Bend, right? Everybody's been to Bend, Sun River. Two perfect examples of what you're talking about, especially over the last 20 years. Up on top, at the crest, that is the B&B fire, okay? And that burned, I don't know, mid-2000s, something like that. And everybody remember, it's just a ghost forest of snags. Like you said, that Manzanita, it's finally coming back a little bit in some pine component and that kind of stuff. Then you come down the hill just a few miles and right out there around Black Butte, they've been doing thinning and prescribed fire treatments. And you look, it's gorgeous, right? Those big ponderosa pines, they're all spread out. You can see through there. If a fire hits that place, no big deal. They'll just literally drive out there, whack it with a stick, and the thing goes out. That is a treated landscape versus that stand-replacing fire landscape, right? And that's what we talk about. That's the end game that we're trying to establish across the millions of acres of federal ownership. I think what I want to make sure, though, Chris, before we leave this point, people would say, well, on private lands, right, in those 20-year-old plantations, when a fire goes through there, there's nothing left either, right? Isn't that all nuked? Yeah, frankly, it is. They burn, right? But what happens? That 20-acre, 20-year-old reprod stand might catch on fire on the wrong day, right? Say it's part of a bigger fire. And it burns that thing to a stand-replacing stage. And what? It stops at the road at the top of that ridge. So we lost 20 acres that day, right? Because we've got our landscape broken up from a contiguous fuel standpoint, right? And so I don't want people to fall into a trap. It's like, oh, it doesn't happen on private lands. No, that's why we hate fire so much, right? That's why we are so aggressive about putting out, because it causes enormous damage, but not on the scale. Not on the scale that we're seeing on the neighbors.

Chris Edwards: Right. So in hearing policymakers talk about, to that point, private lands versus public lands, I've heard it said that, well, old growth is more resilient. The old growth on public lands is more resilient to catastrophic wildfire, and private lands are much more susceptible to catastrophic wildfire. And notwithstanding the years and years and years of

statistics that show otherwise, what about those Labor Day fires? Because those Labor Day fires burned a lot of private land. So what do you say to that? Because it's true.

Kyle Williams: Well, in the context of Labor Day, you could have burned a glacier. There are far more seasoned firefighters. That's why I hesitate when you talk about top five in terms of no land. There are real fire dogs out there compared to me. And there were folks that saw Labor Day and went, I don't want any part of this ever again. That was cataclysm on a scale that they never even thought would happen in our lifetimes. And so Labor Day was a very anomalous event. I'm going to break this down a little. Because of the wind that we saw that day. It was a perfect storm of 50 plus mile an hour dry east winds on the heels of a long duration drying spell ahead of it. We had, they're called indices, which measures how receptive your fuels are to fire. They were setting records prior to putting 50 mile an hour winds on them. And then we had a bunch of power infrastructure that wasn't ready for a windstorm like that. We have them, right? November, December, every year, we've got 50 mile an hour winds, trees going through power lines left and right, and everybody's like, oh, well, power's out for a day, they get it patched back together. Well, in that case, power goes out, fire starts, off to the races 50 miles an hour, pushing that thing until the wind stopped three days later. And in three days, those fires covered enormous swaths of land. And it didn't matter who owned it, how managed it was. It didn't matter whether it was a house, a parking lot, an old growth, a four-year-old tree. Everything burned. So don't let anybody fool you about Labor Day. There was nothing we could have done about stopping those fires until the wind quit. It just is. We have to pray to God that that never happens again in terms of timing, wind duration, etc. Or, if it does, that we've got a better plan in place ahead of time relative to turning off that power, if that was what we have to do, relative to burying those high-risk transmission lines in places that they're going to start fires like that where the wind's going to funnel. We have to be better prepared because I can't guarantee you it's not as much hope and enwish and praying as we might do. We could have a wind event like that again this summer. Heck.

Chris Edwards: And we've always had east wind events. That's not new with climate change.

Kyle Williams: Absolutely, no, that's not new with climate change. That is a characteristic of late summer, early fall in Oregon. Always have those. Just not to that scale, at least in our most focused time.

Chris Edwards: Yeah, I think a lot of people that have grown up in western Oregon just think of the wind coming from the beach. And so the wind comes from the north, the wind comes from the south, southwest. It brings rain. It's generally associated with a storm. Not dry and hot.

Kyle Williams: Well, and yeah, they are a very common thing. I will say this, going back to my time in Toledo, the most acres that ever burned during my tenure in Toledo was on Halloween in an east wind event. Yeah, lost 500 acres on Halloween.

Chris Edwards: Really quick before we leave it, though, you had talked about how old growth is resistant to catastrophic fire.

Kyle Williams: Patently false. Patently false. Okay, when the fuels at the ground level were having regular intervals of fire on them, so that it didn't get up into the crowns or burn as intensely as it is now, sure, old growth could survive that. Nothing is surviving these fires that we're having now, because the fuel loading goes halfway up that tree, right? So that brush catches on fire, burns into the crown, whoosh, you're gone. Without a crown, a tree is dead. I don't care how old the stupid thing is, okay? Don't let them fool you. The kind of fires we're having now, old growth is not more resistant than whatever the private lands example was.

Chris Edwards: Hope you found the first part of this two-part discussion as interesting as I did. While part one focused on wildfire suppression on federal land, in episode two, we'll get into wildfire suppression on state and private land in Oregon, and how unique our system is, including the complexity of how it's financed and what concepts are being considered to address the growing cost of wildfire. If you have a question about something you heard in this episode or something else, just send us an email at podcast at ofic.com. That's podcast at ofic.com, and in a future episode, we may just address it.