dindria barrow :	<u>00:00:01</u>	Hello, this is dindria barrow of the Community Archive Center, and I am at the PLU Earth Day and Diversity Week, and it is April 18th, 2023. I am with an amazing group of people who have much knowledge about the Chambers, Clover Creek Watershed. Please introduce yourselves as we go around.
Fred Tobiason:	<u>00:00:25</u>	I'm Fred Tobiason, Professor Emeritus of the chemistry department here at PLU. And enjoy being here with all your people. I think when I became interested in watershed, I grew up in a small logging town in north southwest Washington and trapped in my earlier years. In fact, I roamed the creeks and water all the time, so I like water. Like came to PLU No interest in watershed particularly, but just being involved in the school. I, I remember at the students swimming in the creek. Diving off the bridge, down the lower hill. Yeah. I remember was swimming many times. Didn't think about the creek disappearing with that now, but I, through that, I don't live near the creek. I live little ways away live by Spanaway Park. So, I get over in the park and I get over to Spanaway Creek in the, through the park area quite a bit. That was a nice running stream all the time. And I'll stop there.
Richard McGinnis:	<u>00:02:15</u>	Yeah. Muggs McGinnis or Richard McGinnis. I'm also Emeritus biology professor from PLU I, being a biologist, and a fly fisherman. I was raised with a fly rod, my hand. I first moved to the creek, in about, in the early 1980s. And it was a thriving community, natural community up there. There were native cutthroat, the salmon that the students used to release at the creek spawned right on my property. There was gravel and running water. There were at least three species of native amphibians. There were rock sculpins, which are torrent sculpins, which only tolerate, only live in fast flowing gravelly water. And things began to change on the creek. Of course, no, they began to change when the Americans came. That's when it first changed. I have to say. I read, when I first moved to PLU, I wanted to read something about the history of the area, and I read the history, and I remember reading a story about the end of the Naches trails at the upper Clover Creek.
Richard McGinnis:	<u>00:03:19</u>	And this woman that had been on a wagon train got to the creek, she was starving. She related this story, and this Indian woman brought her a loaf of bridge. She said it was the best bread I ever had. Unfortunately, the Americans did not treat the natives as kindly and graciously as that woman treated the American. And of course, the problems. That's when they began, when we began the fences, I mean, Native Americans lived here for 10,000 years, harvesting salmon. There were at least five populations of native salmon, not counting the landlock cutthroat, which were thriving 20 years ago on the Upper Creek. And they're no longer

		there. I'm convinced. There, were five populations. I saw a picture named Tom Cameron, who had a gas station over here on Clover Creek in Pacific. He had a picture of him holding a king salmon that big from the 1940s.
Richard McGinnis:	<u>00:04:09</u>	That was probably the last one that ever made it up there. And I became very hopeful. Then one meeting Fred and the people trying to work to preserve this, I got very involved in, in the Naches Trail Preserve and preserving that. When, but when the county that bought that property and acquired all that property about 20 years ago, that's when things went to heck on upper Clover Creek. Cause Tom Cross had built a road and a bridge across the creek up there. Then the county has elevated that road. They put in a beaver dam, my neighbor and I, who's not here, I was wishing he could be 90. His wife was lived on the creek in the forties. He moved there in the fifties, and he's known that Craig, that culvert, the railroad covert, which is a four-foot culvert when she was a girl, could walk through it.
Richard McGinnis:	<u>00:04:57</u>	It's plugged. There has been no water below the top of that culvert for over 10 years and standing water on both sides. And we fought with the county. We fought with the railroad. The railroad about 10 years ago, even brought out and tried to raise some stuff from the upper side of the creek. But keep in mind, there's a gas main that grows through there. There's a sewer line that goes through there. And they made an attempt, but it was, was futile because there was standing water on the lower side. So that creek back up there, since the county has taken over the property up there, has basically become a series of marshes that instead of having native cutthroat has introduced bullfrogs and eastern pond turtles. It is no longer a native habitat. There's still birds. There're still tree frogs. I don't know if the three, there were red-legged frogs.
Richard McGinnis:	<u>00:05:47</u>	They're gone. And those are pretty rare. And so to me, we've, the county, the railroad did try to do something, but in our recent interaction with the railroad, after I hired somebody to measure the water on both sides of the culvert, two feet higher on the upper side, when we filed a complaint against the railroad, they said, it's not our fault. I said, is it our fault? She says that's attorney private privilege. And that's where it stands right now. This she asked last year. It didn't flood. Meanwhile, whatever stopped the spring from flowing up there. Water no longer flows in the summer from the springs on Upper Clover Creek. Upper Clover Creek is a series of marshes with native, with non-native turtles and frogs being the, the most dominant species. They're still native birds. I guess I've said my piece. I'm the fly in the ointment. <lean action.<="" labeled="" td=""></lean>

Sherry Tonn:	<u>00:06:45</u>	I'm Sherry Tonn, professor emeritus in chemistry. Came to PLU in 1979 as an assistant professor of chemistry. Met Fred actually during my interview and Bill Giddings and Chuck Anderson, et cetera. And, quickly, became aware of their involvement with the Audubon Society, and they certainly knew a ton about Clover Creek, which, you know, they communicated to me very early on. And by the time I got here, it had already been channelized and the flow across campus had stopped, and there was just a little bit of a remnant there. My house used to be, I used to live on lower campus, at the corner of the PLU property. And the creek used to run across the Keith Lee Playfield. And it was long gone. Totally obliterated by that point in time, and totally channelized into the concrete channel that currently exists.
Sherry Tonn:	<u>00:07:51</u>	And, there's a picture he has here that shows, where the creek used to run across lower campus. West of where the Reiki Science Center is today. I view the watershed as essentially going from about five 12 over to, as Mug says, the area where the Naches trail ended and then south to, Spanaway Lake. And all of those came to come together to make lower Clover Creek, which runs under the McCord runway in a culvert, a big culvert, but not one that's very good for fish habitat, then becomes, Chambers Creek and runs on into Puget Sound. So that reflects, I think, the, the magnitude of the watershed. So, it's a heck of a lot of area that is either some still semi-rural, exurban suburban and urban during the course of running across, its length, the creek's length.
Al Schmauder:	00:09:03	What'd you do with students here when you taught?
Sherry Tonn:	<u>00:09:05</u>	We'll get to that later on.
Al Schmauder:	<u>00:09:07</u>	<laugh>, my name is Al Schmauder. Uh, I accidentally fell into the job of being the, the head cook on restoration in the watershed. A guy was trying to, to get the water flow over here in Pacific, in the creek. And I was trying to, I was gonna help him, and I got mixed up with Pierce County government and stuff. And the way we went, there's like pulling on a ball of yarn. There's just no end of it. You start on this thing, and it never ends. So, I've done a lot of work with students teaching, just had a lot of fun here. We'll talk later. Thanks.</laugh>
Don Russell:	<u>00:09:53</u>	I'm Don Russell. My first recollection of the watershed was 1936, and I'm standing on the bluff overlooking American Lake. And I thought to myself at the time, this is a huge water body. I came back when I was 11 years old in 1941 and it had shrunk. And the pr, apparently, I had grown and the lake had shrunk <laugh>. But essentially that's, that's the perception of someone</laugh>

		who's pretty impressive when they're young, but then you become wiser as you grow older. Anyway, my family has owned property on American lake for 114 years. So, we've seen many, many changes over that period of time. Some of the really big changes that have occurred were happening in the 1950s, when essentially in the 1950 era, there was some major groundwater flooding events. And American Lake rose so high that it began to inundate the local homes around the lake and, flooding the septic systems. So, it was a big deal.
Don Russell:	<u>00:11:00</u>	We had, a real effort at that particular time to try to get something to alleviate this condition. And the Army Corps of Engineers who owned Fort Lewis at the time said, we are without any resources, and we can't do anything for you. It just so happened on that lake, Eisenhower's brother lived and, his brother essentially got ahold of somebody, the Corps of Engineers, and said, you're gonna fix this <laugh>. And they did. Actually, what they did is they put a weir at the end of, American Lake to control, and a drain system that drained into Sequalitchew Lake that maintained the highest level at, 233 feet above sea level. So ever since that time, American Lake has never risen, even though it had groundwater flooding in recent years in the 1996, 99, 97 area, the American Lake still is controlled, so that it seldom rises above about 234 feet because it sometimes it overflows the weir, by a foot.</laugh>
Don Russell:	<u>00:12:11</u>	The, problem we've had lately is that the, American Lakes, water level has slowly dropped, and we seldom now ever get it up to 233 feet. Typically, it's going down as low as about 229 feet. So American Lake and all the other lakes around here have dropped as much as three to four feet and their average rise and fall. It's obvious that the groundwater that supplies water to these creeks and, lakes, has generally dropped. And this is probably because of over harvesting groundwater. And essentially, my focus has been, whereas Al has been primarily in, and the rest of you have been primarily in the upper part of the watershed. My focus has been from American Lake through Sequalitchew Creek, Edmonds Marsh, Sequalitchew Creek, and I've seen that, essentially, become, pretty dysfunctional in the last, I'd say probably 15 to 20 years now.
Don Russell:	<u>00:13:26</u>	So we do have a common problem here, and that is that the watershed is, fed by precipitation. The precipitation used to infiltrate into the shallow aquifer and aqua series below that, and the maintain enough height so that there was water in most of these lakes and in the streams and the area. Now Carp Lake, is now dry in the summertime, which is amazing. Um, it's Carp Lake. So there's no question that the, the management of our freshwater resource in the Chambers Creek watershed has not

		really, performed as the Bay Water Act, and the Washington State RCWs and WACs would have us do that. So, there's a fundamental problem with the governmental agency is really not up being up to the charge, up to the challenge of, maintaining this watershed for fish and for people.
Don Russell:	<u>00:14:43</u>	We now have 80% of our lakes, experienced toxic algae blooms. And this first bloom occurred in western Washington occurred on American Lake in, 1989 to 1990. And this created a lot of stir because 11 pets were poisoned, five of which died. And this brought the attention of the health department. And the health department did an awful lot of studying as to what was going on here. And they used to keep records of, the currents of freshwater algae blooms. They used to keep; they would monitor wells to monitor the, groundwater levels. And essentially that's all gone by the wayside. There is, very little attention now being paid to, trying to maintain the water levels in the ground so as to have adequate water flowing in our creeks and in our lakes.
dindria barrow :	<u>00:15:45</u>	Thank you so much. we're gonna move to the next question, and if you want to continue to add to how did you come to know the watershed? The next question to add to that is, describe the watershed that you know
Al Schmauder:	<u>00:16:04</u>	Before or after?
dindria barrow :	<u>00:16:06</u>	<a>laugh>? Yes. That, that is exactly the question. So you can choose to do both one or the other.
Al Schmauder:	<u>00:16:16</u>	Fred's very smart. He did a study of 27 people, interviewed old timers and wrote a, wrote a story on that. You might want to go off of that one a little bit.
Fred Tobiason:	<u>00:16:25</u>	Well, they detailed their fish and stuff during the years, and it had water up too, the time. And I remember I used to photograph everything, but pictures of old give to, I transferred all my pictures to the computer and I would give 'em all to you. And then I get it when I get it. They're in, they're in the computer now, but they gotta be <laugh>. I saw 'em when they, when they, I remember I was used to look where the bridge on go back and forth to PLU to work was kind of trickle along there. But then I remember when they, I looked there one day and they were dug it out straight down, put it that overflow runway down Tule Lake Road. And, I saw 'em running up there with a backhoe, jumping big shovel on there, shovel out to creek every, every year that, that, the end of that walk part, I saw lot that part of the creek. But I used to stand with my hip boots, and I'd stand at Waller Road in, in the water hit on my hip</laugh>

Fred Tobiason:	00:18:07	Up along, and he hoped to, uh, Naches trail. And the water is always running there, flowing, flowing there all the time
Richard McGinnis:	00:18:16	With salmon native,
Fred Tobiason:	<u>00:18:19</u>	With there's controls there. They is naturally flowing really nice. And, you go down the creek and you go to, you get a little less flow down by D Street, but then you go down to anywhere from, well, it just above Pacific Avenue, it's all gone. No water drains off. I don't know what water sinks in the ground, but, uh, it's all gone from there. And you have a, you have a Spanaway Creek that's running all year. That's keeps the Chambers Creek and that going, that's coming out Fort Lewis. But, that's, uh, you always have water there.
Fred Tobiason:	<u>00:19:30</u>	So I think the dysfunctional part of the stream far as, you don't have any flowing and lower part of the stream through that, um, about,
Richard McGinnis:	00:19:42	Yeah. Well, that
Fred Tobiason:	<u>00:19:45</u>	Pacific Avenue up.
Richard McGinnis:	<u>00:19:46</u>	Yeah. Well, Pacific Avenue, 20 years ago up was at least up where I was all the way down at least past 38th was a healthy flowing stream. There were juvenile salmon of those salmon that spawned up there, that the kids released that actually I saw them just below the railroad trestle when we were, I was very involved in getting the nature preserve set up. I put spent a lot of time money in writing doing that. And when we surveyed that, there was flowing water, native cutthroat, like I say, red-legged frogs and, and salamanders. I think there was even lung salamanders that were up further up the creek on the Sportsman's Club. But that creek now is like Lower Creek. It is basically a series of marshes, and it dries up in the upper creek. I don't know what happened to the spring if, I mean, there has been tremendous development up there. I mean, I don't know if you've driven out near Frederickson? When I moved there in the early eighties, mid-eighties, it was rural, it is now major industrial area, major apartment complexes, big development all the time. And I don't think, I don't know how much the development had to the effect on what's going on up there, but the upper creek is now like the lower creek.
Fred Tobiason:	00:21:12	Oh. I think little flow, the springs would come from the side.
Richard McGinnis:	<u>00:21:15</u>	Yeah. Well, there still are some springs that come in, but that very upper one must have dried up. I mean I don't know if we

		could get up there to, somebody could get up there to take a look. I did, I think I went with you. We went there one time.
Fred Tobiason:	00:21:29	It's pretty good. The Springs were really bubbling up. On the old, uh, sportsman club.
Richard McGinnis:	<u>00:21:36</u>	Yeah. We went up. I went with you and there were, you could see the springs coming out. Well, that water's not there anymore. So it's a tragedy.
Sherry Tonn:	<u>00:21:50</u>	There have been huge efforts on the part of Al and the Clover Creek Council and even some parts of the county, the work Fred's done, the work Mugs has done. But in spite of it, the creek has continued to deteriorate. And, you know, a major turning point was when it got channelized and removed from the PLU campus and, you know, has a cement bottom to the South, and it's made anything going on down on Chambers Creek in terms of restoration that much harder because there's so much less water flow that even makes it down there. And Spanaway Creek is one of the redeeming features that still provides some water to the lower watershed. But Clover Creek, like you've heard during the summer, there's just nothing there. When we used to do the 350 class in the summer, uh, we had one sampling site that was at Pacific Avenue, where the bridges and the creek went under the bridge.
Sherry Tonn:	<u>00:23:00</u>	Well, that was a problematic site because often in the summer, there would be no water there to sample. All you had was concrete, asphalt actually on the bottom. And, you know, Roxy Giddings used to claim or claim that upstream where it crossed the golf course, the bottom of the creek, that was still, you know, semi, original had been, dug up so that the water would go underground and keep from flooding the golf course up there. I don't know if that's true or not, but at any rate, that was about the point where the creek at that point in time would just disappear before it got to the part that had actually been channelized. So, you know, what can be saved from the creek today? I think it's gonna take another generation or two of people who are willing to be active and get out there and do something about it. Right Al?
Al Schmauder:	<u>00:24:02</u>	Well, unfortunately, you're partially right. The problem with our watershed is it's an orphan. It has no mother, no father, no tribe. And Nisqually has a tribe. Puyallup has a tribe, they're interested, they depend on it, they follow it. They got natural resource managers. The way they set up the weir, according to Chris Kauffman, was they set the weir up for the two river systems, and what was left over became weir 12. So we have land in our weir that doesn't, it flows to the Puget Sound, doesn't

		even flow the Clover Creek or Chambers Creek. It, it's, it's on the edges. Whatever's left became our wire. And there is no, accountability responsibility for maintaining the natural resources in our watershed. The tribes have a cultural interest. Well, Americans that settle in our water should have no cultural interest.
Al Schmauder:	<u>00:25:06</u>	Their cultural interest is the development. And development always wins out over restoration, always greed, profits. There's always somebody looking to take a swamp and put a school on top of it or go over to Lakewood and put a Lakewood city hall on top of the swamp. Because it's cheap land. Yeah. Says, well, community village wanna go out here, Spanaway Lake and find a swamp, build 285 houses out in the country, the land doesn't support it. Yeah. We don't have any sustainability, goal in our watershed. It's, you know, you use it as much as you can and let someone else worry about it. And the problem is you can't find anybody that that's tagged with responsibility to say, I'm responsible for watching this. Keeping the natural resources working, watching the creek, make sure the culvert under the railroad doesn't plug up.
Al Schmauder:	<u>00:26:01</u>	You know, make sure the fish ladders don't plug up. It's left to mother nature. Yeah. And unfortunately, mother Nature's done a great job and we've done tons of restoration over the last 30 years, spent millions of dollars on habitat, fish ladders, conservation futures, Naches East trail, nature preserves, strategic nature preserve. We've got eight pieces of, of conservation land we've been able to purchase with taxpayer money, conservation futures ones. But the problem is we're killing the creek. And how do you know the creek is killed? Is when it runs water. It runs outta water. You can't keep a habitat. You can't keep trees growing. Your bugs don't grow. It's dead when there's no water. Yeah. So what do we do? Is the question. We'll get to that later. Yeah. I'll let Dalton talk a little bit now.
Don Russell:	<u>00:27:11</u>	The governmental agencies that are charged with managing the quantity and quality of our freshwater resource simply do not do their job. And that has manifest itself in the Chambers Creek watershed in spades. Our watershed is a harbinger where all the other watersheds in the Puget Sound Basin are gonna go. And if we don't wise up and realize that the Chambers Clover Creek Watershed is what is going to happen to all of the other watersheds that are dependent upon precipitation for their freshwater resource. So it's a shame that we are not learning the lesson that the Chambers Clover Creek Watershed is teaching us. Because essentially it is inevitable that this is quite a trend that will continue into the future unless somebody essentially steps in and decides to do something about it.

Fred Tobiason:	00:28:16	That part, was there water in that, above the overpass over bridge? Over on 38th.
Richard McGinnis:	00:28:27	Hundred 38th. There's water there now, I think. Yeah,
Fred Tobiason:	00:28:30	Because it always went dry right afterwards.
Richard McGinnis:	<u>00:28:33</u>	No, but there's not water over the road, but there's still water through there. But I don't know how well it's flowing. I mean I've never traversed that area below 138th, but I have up above, especially when we were doing the Naches trail, I mean, it was really a thriving stream in there all the way up to its origin, even in the summer. And as you said, and you said, you know, in the last 20 years, I've become much more cynical and pessimistic about the state of the world. I still had some optimism 20 years ago. And I think you're right. I think this is just a symptom of a bigger problem. That profit development is what pushes things and this is, it's a microcosm of not just of the watersheds of the planet. Yeah. It really is. What we, when I was born, there were less than 2 billion people on this planet. There were probably about a one and a half when you were born. There's now eight.
Richard McGinnis:	<u>00:29:36</u>	Right. And we just won't wise up to figure, we have to figure out, we're a single tribe on this planet. We really do. Because what other people do affects us. And of course, we have a bigger effect on other people the way we consume. But it is there is still, I think there is still some hope, but I'll tell you, I mean, just with the railroad and the county, they own all that property below where I am. The county points at the railroad, the railroad points at the county. I mean, that's basic. And I would think that culvert is breaking some law piping completely plugged. It's damned. It's a dam. And the county road is a dam where they built between the preserve and the county park there. That cross park is basically a dam. I mean, it's the county that did that. It's public institutions that are doing it. It's not the, the landowners that are doing it, it used to be the landowners when they re- channel the creek and, and that sort of thing. But, but you're right. It's a symptom.
Al Schmauder:	<u>00:30:42</u>	And, what's happening, you know, we have a water cycle. Evaporates rain comes down, goes in the ground, goes out the sea. Well, we now have a human water cycle where the water comes down, goes in the ground, we pump it out and we send to Puget Sound. 24 hours a day. Seven days a week. So we're pumping a huge amount of water to Puget Sound, through the sewer system. And it's been increasing. The amount of pumpage that we have like seven or eight water purveyors in our watershed, and they have probably 200 wells. So they're all got their straw in our limited soil source. And they're all sucking

		water out. And all the water they suck out goes to Puget Sound. Almost all. Let's the irrigation accepted. And that's not gonna stop. Yeah. And to make it worse, people in the upper watershed purveyors have now exhausted their water rights, some of 'em, and their ability to pump more water. So the simple solution is to buy water from Lakewood downstream. So now Lakewood has a 12-inch pipe that physically brings water upstream to these purveyors. So they can assure development can continue cuz they have to approve their water.
Richard McGinnis:	00:32:11	So, they're pushing water to Frederickson or?
Al Schmauder:	00:32:15	Outstream. Yeah. Probably to Fredrickson. I've gotta confirm this. But Spanaway now buys 2000 gallons, two, 2 million gallons a day, from Lakewood.
Al Schmauder:	<u>00:32:24</u>	And they're now can develop more apartment houses business. And now that's, people don't realize we only have a fixed amount of water. And our rainfall comes down pretty constant every year, about 40, 45 every year up and down different times of the year. But we get same amount of rainfall. The only thing that's changed is we're sucking more water and selling out Puget Sound. That's the only thing that's changed. And we're using more water and we're stealing water from downstream. We're bringing it upstream. And eventually we're going that's why you're drying up. The springs are drying up, the water is going down in the upper water in the aquifers. But they got plenty of 'em in Lakewood for now. But what's gonna happen when Lakewood says, you know, we can't dry more water. Yeah.
Al Schmauder:	<u>00:33:19</u>	All these people had depend on water. We're a sole source. We can't take money water out of a river. Now we'll have hell to pay. But the problem is there's no sheriff in town. There's no nobody to say, well, you're responsible. No, I'm not responsible. Uh, and I have no authority to change this, and nobody can put a badge on go out there and make something happen. There's nobody watching. Yeah. We have no groundwater monitoring program to tell us what's happened to our groundwater. It's outta sight. So, then you throw on PFAS and chemicals from the, from the tires. The six PPD that's another area by itself. Yeah, yeah,
Don Russell:	<u>00:34:04</u>	Yeah. There's another interesting aspect of pumping water from Lakewood and sending it upstream up to the headwaters of the watershed. And that is the water that is being withdrawn by the city of Lakewood is from deeper aquifers. Those deeper aquifers contain more minerals. And those minerals essentially are being pumped upstream and essentially through septic systems, those minerals increase the nutrient content of the water that is flowing in our streams and our lakes. And the response, of course is

		excessive aquatic plant growth, algae blooms. Yeah. And essentially filaments of green algae blooms as well, which are nuisance. But they essentially will coat a lake with a scum. Whereas the toxic algae blooms, of course coat the lake with, powerful cyanotoxins. So, it's not only a quantity issue as far as water's concerned, but it's a quality issue as well too, because this pumping head from first to septic systems, upgradient is exacerbating the lake and the stream pollution problems.
Richard McGinnis:	<u>00:35:17</u>	And meanwhile it's carrying all that sewage with nutrients in, into Puget Sound. Yes. I mean, where it used to be salmon coming up this creek, now there's sewage going down.
Sherry Tonn:	<u>00:35:27</u>	Well the sewage gets discharged in lower Puget Sound. So, the wastewater treatment plant is at the mouth of Chambers Creek. And when you think about the lower sound, essentially, it's a body of water that has crappy circulation compared to Puget Sound north of the Narrows Bridge. And so the loading for the lower sound is dramatically increased because of all this additional sewage that's ending up down there. Yeah. And that's why the wastewater treatment plant in Lakewood, um, in, uh, at Chambers Bay has been just increased in size so dramatically.
Richard McGinnis:	00:36:12	How deep do they put that sewage out?
Sherry Tonn:	00:36:15	It goes, it's about 200 feet.
Richard McGinnis:	00:36:17	Yeah. See, and that's the wrong place to put it because it's circulation and estuary.
Sherry Tonn:	00:36:20	Exactly.
Richard McGinnis:	00:36:21	It carries that stuff up the estuary rather than out of the estuary. If, but they won't put it in the surface cause it'll get on people's boats. Right. I guess that's the reason.
Sherry Tonn:	<u>00:36:30</u>	Well, the idea is dilution. Yeah. Put it down deep or it'll get diluted. Yeah.
Richard McGinnis:	00:36:34	But it carries it exactly off the estuary.
Al Schmauder:	00:36:37	Yeah. Ecology did a dissolved oxygen study and it's way low in that. And all the outfalls, Seattle's got the problem. We've got the problem. Olympia had the problem. Yeah. So, the fish can't survive in those situations, but you gotta put your sewage someplace.

Sherry Tonn:	<u>00:36:57</u>	And they're doing some advanced wastewater treatment at the, um, Chambers Creek wastewater facility, but it's not to the point of being tertiary treatment like with, particularly nitrogen and phosphorous removal like Olympia has done actually for a long time. But the, the load to the south sound is so much higher now than it used to be. So much higher.
Al Schmauder:	<u>00:37:23</u>	To exacerbate it a little bit is than the nitrogen, I guess is what Yeah. What is, what the sound doesn't like. Yep. The lakes like phosphorous, but nitrogen screws things up. There's not been a nitrogen standard release standard set by ecology. It is like 30 and we're putting out 30 milliliters or milligrams something per, per something we pump out a lot. But there's no standard you have to hit. So, when the sewer say, Hey, we're living up to all the quality standards, we're doing great. Well, the standards don't exist, so how can you live up to 'em <laugh>. And then also, they were smart enough in Pierce County to put in a nitrogen, denitrification process, but they don't use it. And when I asked the director of public works, Brian Ziegler, why don't we use that? He says, we're not required to. And why should we? It's don't cost money to reduce the nitrogen content, we could do it. But he says, we're, we don't want to increase the cost to our clients if it's not a requirement. So that we could get in trouble for raising the cost to our clients because we're trying to improve the water quality. And it's not required by ecology. Yeah. So now ecology is trying to set some limits, but, but the, I understand the outfall of the sewage people are fighting it.</laugh>
Sherry Tonn:	00:38:45	Absolutely.
Al Schmauder:	<u>00:38:46</u>	They don't wanna meet this standard because it's gonna cost somebody some money. But it's enough sound no problem here.
Richard McGinnis:	00:38:52	Yeah and the old maxim always, we all live downstream. I mean, we do what that effect that it has out there is gonna come back and affect us.
Al Schmauder:	<u>00:39:00</u>	Well, you see, they don't worry about fish, small food fish to live in the, in the Puget Sound for the orcas and for the others in the salmon. And if the baby fish can't survive, no. Because they can't, having the oxygen, what do you expect?
Don Russell:	<u>00:39:18</u>	Yeah. The one of the fundamental problems, with ecology at the present time is that their water quality standards for freshwater groundwater and saltwater are absolutely totally inadequate to cause people like those utilities to have to do things that would preserve essentially high-quality water, for, fish as well as human consumption. I run across this over and over again. They put these TMDL requirements total maximum daily loads, and

		they monitor, the standards are very few in existence and totally inadequate. For example, nitrogen, essentially if it exceeds 10 parts per million, it's considered to be a human health hazard. But salmon cannot survive nitrate concentrations in excess of about two milligrams per liter. So there's a hell of a discrepancy between what they've set for standards versus what is required to have a healthy habitat for salmon
Sherry Tonn:	<u>00:40:34</u>	And to give ecology a tiny bit of credit. So they develop new standards and what happens, the city of Tacoma among others, sues them over those standards. And there's currently a lawsuit pending filed by the city of Tacoma because they're trying to avoid having to upgrade the Central Wastewater Treatment Plant. That's on the banks of the Puyallup River and discharges into Commencement Bay.
Sherry Tonn:	<u>00:41:05</u>	So, you know, that's different than the county's facility, which actually meets the standards. It's just the standards aren't very good. But the new standards, but the city of Tacoma won't even go that far.
dindria barrow :	<u>00:41:24</u>	I am learning so much and I have to admit that there are some things that I don't fully understand. So I'm gonna go down to the very last question. What can we do as a community to protect this watershed? Is it too late? And what lessons can we learn that we can put into action for the other creeks? The other watersheds?
Sherry Tonn:	<u>00:41:53</u>	Well, one immediate thing is, I happen to like the current director of the Tacoma Pierce County Health Department, Dr. Chen, but he's retiring and we're going to have a new director for the health department. And having a director of the health department who has a clue about the environment is a critical first step. I mean, it can't hurt. And we have had a few health Department directors who not only didn't have a clue they were truly anti-environment and I would call Dr. Chen kind of in the middle of the overall spectrum. You know, he is a great guy, but that was, that's not been necessarily his priority. So anyway, that's one thing that I think, you know, some immediate action in terms of the new health department director is critical. That's just one thing that's gonna happen right away.
Al Schmauder:	<u>00:42:57</u>	Well, there's darn few things that you know, that really have come out that you can recommend that you can do. I have two things. One of 'em, which was recommended when we did a parks review, was to establish a natural resources manager similar to what the tribes have. All the tribes have a natural resource manager. And we were going, we wanted to have that person report to the county exec for this at such a high level

		cause he had to be above the director of Public works and the director of planning, this guy has to have a little direct influence on your county exec. And what happened years ago, maybe like 10 years ago, it went through the recommendations and the county exec, agreed with it. Think John Ladenburg said, yeah. So, he put in his budget to hire this person, but the county council wouldn't give him the money, didn't approve that line item in the budget.
Al Schmauder:	<u>00:43:53</u>	So it got that far, but it never got approved. It's gonna cost a couple hundred thousand dollars to hire somebody. And then you gotta give him some responsibilities, until we find somebody that's willing to go out to the railroad and say, how come you're screwing up our creek? Or how come our nitrogen levels are don't match what we have to have for our salmon to survive or fish to survive. And if these things are wrong, we gotta correct this. And they have to have enough clout and connection to makes things happen. But it's gonna be very difficult to, you know, it's probably be a challenging job that nobody would want <laugh>. The next thing is we need to have a groundwater monitoring program in our watershed. We need to know how much water we have and how long have we got to live here before we change residences, go to some other place to live because we're outta water.</laugh>
Al Schmauder:	<u>00:44:48</u>	We don't know that. And it's outta sight, you know, outta sight and out of mind. And it's not a hard thing to do. The health department did one in 2005 or six where they study a thousand wells. They got a lot of money to do this. And they found in a watershed, there's about 12 wells they tested and they looked like about four or five of 'em were declining in water content. The, the, the groundwater was declining. They did some graph showing in, but they ran outta money. Nobody redid the study. So, um, we have to begin to know how much water we have, how long it's gonna last, and is are the things we can do such as water reuse? Could we clean it up enough to put it back in the water in the ground and drink it later on with all these chemicals we gotta get out of the water?
Al Schmauder:	<u>00:45:40</u>	Or is it poisoning ourselves to put water reuse? We don't know. So, those are two things that I think about. But, um, they talk about what educates your population. People if more educated, they learn more. You know, shit, we've been down, oops. We've been down that road trying to educate people. People don't have time to today when the, you know, when the settlers came here, they had a creek, they drank the water. Clover Creek was the main water for Tacoma in 19 hundreds, their main drinking water. And they shipped it all the way down to as a cistern

		downtown Tacoma. Remember they had a aquifer. And in a pipe. But you can't do that now. And people don't depend on the creek. They don't even know where it runs. And you used to put your water, your cream or something in the creek where it's cool, you know, and you use the water. The cows drink the water. Now there's the cows don't exist. People don't depend on our natural resources. The water comes outta the tap and everybody's happy.
Sherry Tonn:	<u>00:46:48</u>	Well impervious surface is a big deal too. And as Frederickson further develops with more warehouses, there's less and less impervious surface, or there's less and less pervious surface to allow recharge of the aquifer. And it's getting piped off to, you know, God knows where, but it's certainly not recharging the aquifer and not recharging the streams.
Al Schmauder:	<u>00:47:15</u>	How could you fix that?
Sherry Tonn:	<u>00:47:17</u>	Well, among other things to have pervious more pervious surfaces, those warehouses are getting built. And then you've gotta have, you know, good practices to keep, groundwater from getting contaminated as it goes from the pervious surfaces into the aquifer. Yeah.
Al Schmauder:	00:47:38	Now you see
Sherry Tonn:	00:47:38	Or it's gonna just keep getting worse.
Al Schmauder:	<u>00:47:41</u>	Currently is studying a plan to route all future floods down Clover Creek. They're want to build up to approximately one mile of levees. Along the creek to keep the water in the creek. They spent 285,000 to do an engineering study by Brown & Caldwell to how can we engineer the elimination of our natural floodplain. And they came up with 18 options and all the options that which, which would say use your natural floodplain, they threw out because it was, it would be too expensive to keep the natural floodplain. And if they can get FEMA to agree to change the map. So, it takes certain areas out of the floodplain, then it's available for development. And even the director of public works in Lakewood said, reported that, that developers are in favor of this, of this option. Imagine that. Yeah. And they're even willing to provide funding to help implement this. Nice guys,
Sherry Tonn:	<u>00:49:01</u>	The good news is FEMA acts very slowly.
Al Schmauder:	00:49:05	That's the good news. Yeah.
Sherry Tonn:	<u>00:49:06</u>	Yeah. Right. <laugh>.</laugh>

Don Russell:	<u>00:49:08</u>	Yeah. One other thing that's missing, and I've been searching for this for years, is a educational function that throughout the elementary, middle high school says, look, here is what is happening to our freshwater resource. We're abusing this resource. And here is a stewardship manual for you citizens to be able to go out and raise hell with the governmental agencies that are not doing their job. There's a lack of an understanding of how this watershed was designed by Mother Nature to work. And there's a lack of understanding of what human activity has to take place in order for it to restore some semblance of what Mother Nature had in mind. This idea that orcas need salmon. Well, people need salmon because what a salmon requires as a fit habitat we humans need as a fit habitat. And essentially the message is not getting out, to the newer generation.
Don Russell:	<u>00:50:22</u>	You know, all of us are close to the end and, there's no handing off to the youth who are gonna be the citizens of the future, how badly we're getting screwed by the ineffectiveness of our governmental agencies and our crooked politicians. And essentially, uh, that fundamental understanding and action oriented, on the part of new citizens as to holding their politicians and their governmental agencies, uh, accountable needs to be essentially, inculcated into our next generation. Because we got crooked politicians. We got ineffective governmental agencies. And it's, the irony of the whole thing is if you look at the city of Lakewood's, uh, 2023-2024 perennial budget organizational chart, guess who was right at the top? Citizens then essentially gets down to people like the planning manager. They, you know, the Paul Bucich and they're supposed to be taking their instructions from US citizens.
Don Russell:	<u>00:51:38</u>	And what's happening is these bureaucrats are telling the citizens what they're gonna do. to hell with you. We're not gonna interested, we're not interested in your input, we're not gonna let you play in this game. So it's a real hypocritical, organizational map. When you say citizens are in charge, well, that's bullshit. It's the bureaucrats that are in charge. And the crooked politicians are in charge. And until the people begin to wake up to that fact and demand that people do the bureaucrats, and the politicians do their damn job, nothing's gonna change. I don't see any agent. As a matter of fact, for 23 years, I was a volunteer water quality monitor on American Lake and a lot of the other lakes in the city of Lakewood. And last year, the conservation district said, we're gonna discontinue the program of monitoring water quality anymore.
Don Russell:	00:52:35	Because the jurisdictional groups, uh, that are responsible are not supporting us financially. So, what we're gonna do is we're going to focus our attention on trying to, deal with invasive plants in

		the riparian zone. Water's not even on our schedule. I mean, it's criminal. You know? Yeah. Um, so that's the story. We've gotta, somehow, we've gotta get the educational institutions, the academic institutions to train our people, or the least enlighten our people at the extent that the citizens do indeed demand that the people who are in charge of, uh, surface water management, groundwater do their damn job.
Richard McGinnis:	<u>00:53:17</u>	Don't you think the bureaucrats and the politicians are under control of people like the developers?
Don Russell:	<u>00:53:21</u>	They are. As a matter of fact, basically take, uh, you take county executive Bruce. He was a lobbyist for the home builders. He's as crooked as they come. This village placement essentially is motivated strictly by the idea that essentially some guy who's got some, property and a swamp has no market for his property. So, Bruce and the director of the Tacoma Rescue Mission got together in the smoke-filled room and said, hey, let's put this thing right here in the middle of a marsh. Yeah. And it's been a steamroll the whole, all along now. And essentially, it's gonna happen unless people just get up and, you know, arrange hell about it and lawsuits are filed and the rest of it.
Sherry Tonn:	<u>00:54:10</u>	And the irony is where they wanna put the small houses is exactly the area where Audubon and others were able to stop the cross-base highway. From going through and ruining the marsh. It's exactly the same spot.
Don Russell:	00:54:28	That road that was proposed was right through that village.
Sherry Tonn:	00:54:32	Exactly. Exactly. And, you know, at that point in time, it was able to be stopped because it was going to, you know, absolutely destroy the wetland. And here we are again 20 years later, looking at sticking something else there because it's quote, vacant land.
Al Schmauder:	<u>00:54:51</u>	And you see the zoning community plans was, this is going to be a grow residential. Right. One house per five acres or something. There's no services, no sewers, no water. It can't sustain heavy use. So that concept of sustainability is not even being considered. We think any piece of land can be used for almost any purpose, and that's really unrealistic.
Don Russell:	00:55:21	Well see. And that's the sad thing. It's profitability, not sustainability.
Sherry Tonn:	00:55:24	Yeah. Well, and there are other places where the, uh, small house villages could go, but as you say, there's interest in putting

		it in the wetland as compared to places that are on perfectly dry ground today.
Don Russell:	<u>00:55:44</u>	Now it's interesting because, there was an early thought that they would entertain alternate sites. They never considered alternate sites.
Sherry Tonn:	<u>00:55:55</u>	They never considered alternate sites. Never.
Al Schmauder:	<u>00:55:58</u>	So, if they're being sued now by the, Futurewise. Right. They got a suit. And Futurewise has suggested as an alternate site is a 40- acre golf course out by the Western State Hospital. And it's been abandoned since 2018. So, they need 29 acres for their, for their housing that they want, and they'd have 11 acres left over to use for buffering and other things. So, they have an option that's gonna cost more than the swamp. But it'll probably still be there and won't get flooded, you know, but, so the lawsuit is, you know, it's going on, but there's a lot of big lawyers get paid a lot more money than Futurewise does <laugh>.</laugh>
Sherry Tonn:	<u>00:56:45</u>	Well, we'll see. But you know, again, this goes right back to the watershed and recharge of the watershed, and that wetland is super important to the watershed.
Al Schmauder:	<u>00:56:55</u>	So how can you fight City Hall? Years ago, you may remember we had corruption with a, I forget the guy's name. [Unclear] was one guy, and they put him in jail. They had burned down some, some restaurants and stuff because they weren't playing ball with him. And they
Sherry Tonn:	00:57:19	Well, the county sheriff, what was his name? In the seventies. Yeah. They were torching local restaurants.
Al Schmauder:	00:57:27	In-house mafia, you know.
Sherry Tonn:	00:57:28	The county sheriff was involved in torching local restaurants,
Al Schmauder:	<u>00:57:34</u>	You know, and what came to me is, as a society, we have offloaded citizen responsibility to our bureaucrats. You know, we, we said, we need somebody, we haven't got time as citizens to go manage property and do all these things. So well, why don't we set up a little organization that will do this work for us? You know, they will manage things and do things and take care of stormwater and all these good things because individually we haven't got time and individually, we may not know the big picture, so we'll hire somebody to do this for us. Yeah. Well, unfortunately what's happened, the people we hired have gone rogue. They've gone offline on their own self-supporting

		bureaucracies like they always do. When you start a bureaucracy, it never dies. I've being in the military longer to watch these guys they fight to spend all their money so they can keep, get more money next year and build bigger, big, bigger bureaucracies do not die.
Al Schmauder:	<u>00:58:27</u>	And the citizens have given up our responsibilities, you know, because we think they're doing the right thing for the public's business and people don't know that it's not happening. And top it off, how are people gonna learn about it? There's no local newspapers. There's no local recording. How are people supposed to get the information? Go on the internet and find out what you're being fed. Somebody chooses about an algorithm, what we're gonna feed you based on what we think you'd like to read. Yeah, that's right. So, they never hear about our problems. So, we won't take action. We think things are well, we think we have lots of water.
		You know, on top of all these things, we have the climate which is really out of our control. That's, well, half the population believes and that doesn't believe so on. You fight that all out.
Sherry Tonn:	<u>00:59:33</u>	Well, are we an upbeat bunch or what? <laugh></laugh>
Sherry Tonn:	<u>00:59:40</u>	Yes. I do think that it is really important for us to document these changes. Yeah. And I think that, you know, Al knows a ton. Everybody in this room knows a ton that is not documented. Yeah. It's truly not documented. We had a student, Mike Eisenstein, who graduated in 92, who actually did his paper, his environmental studies paper. Essentially walking Clover Creek. He walked it for as much as he could, including some places he didn't have permission, but we won't talk about that. <laugh>. He walked it to document what he could find along the way and that paper's out there, but there aren't very many like that around.</laugh>
dindria barrow:	<u>01:00:24</u>	So would document, like, would that be one way we could find support for students to walk the, like spend a semester walking the creek Or spend an academic year walking the creek and documenting it. That would
Sherry Tonn:	<u>01:00:36</u>	Be, yeah. And taking pictures along the way. and taking, you know, Fred's got a ton of pictures, you know, having somebody go back and actually look at those photos and just compare them to what's there now, you know, and Al's got photos, et cetera. But, you know, we've never pulled together that kind of an archive.

Al Schmauder:	<u>01:01:00</u>	Yeah. I think Mugg's [Richard's] issue with the railroad. Yeah. Right. Is an excellent study for anybody that wants to get lost.
Al Schmauder:	<u>01:01:12</u>	A student could tackle it a little bit. You know, a reporter, we need to say something and tell people and tell a lot of people. And get it to an Army Corps of engineer level, you know, and I'm like, and the railroad. Who do you speak to in the railroad? That means attention.
Richard McGinnis:	<u>01:01:31</u>	Yeah. Well, I actually, one of the letters I wrote 10 years ago, I sent to the State Department Ecology, State Department Fisheries, the gas line company, I don't know think the Army Corps of Engineers I don't think that went there. You know, and, and of course there's no response. County supervisors, you know, it is well, you've had the frustration even more than I have. I think that. You know, when you deal with the county water people paying surface water management fees, well, you go out and measure those. I paid money to have the surveys done to show that it was more than two feet higher on one side. You know? Uh, so it is, it's so frustrating. But that's right. Documenting that is,
Al Schmauder:	01:02:10	You know what you do, you blow it up. <laugh></laugh>
Richard McGinnis:	<u>01:02:14</u>	<laugh>. We've thought about it <laugh></laugh></laugh>
Sherry Tonn:	<u>01:02:17</u>	Don't you love archives like this? < laugh>
Al Schmauder:	<u>01:02:23</u>	Don't go on record. But over the years, one of the theories that I always try to teach the PLU students is you have to cause chaos. Why? Because nobody's listening. The elected officials are so busy doing their work and things they think are good. If you don't get their attention, they don't have to change anything. So you gotta cause crisis. Then they gotta say, oh my goodness, what are we going to do? How come this dam no longer is a dam? <laugh> it broke. Lo and behold it fell apart. You know, now we gotta fix it. See?</laugh>
Don Russell:	<u>01:02:58</u>	Yeah. You know, it's interesting that in, Sequalitchew area, Edmunds Marsh, they used to raise fish in, the fish wildlife. If we used to raise fish there, Sequalitchew Lake. And then they would go ahead and open up the channel through the marsh to allow them to make the exit down to the sound to the ravine there in DuPont. And the fish and wildlife people used to blow up the damn dams with dynamite, huh. To prepare the way, you know. So here they are now, oh, you can't touch a beaver dam because they're great stuff. Well, if you screw up a watershed

		and the beaver dams begin to interfere with its doctoral functioning, blow up the damn dam, you know?
dindria barrow :	<u>01:03:49</u>	Well, um, I love how everything that you are speaking is, lighting a fire under my butt, <laugh>. And it's making me want to learn more. I don't know how much I need to learn before I act. Right. You know, I mean, that's, that's the big question. We need to move on this, dam. But I think I wanna ask one more question. We have about, 15 more minutes and you've already really answered this question <laugh>, but I wanted to see what your response would be altogether. How are the watershed issues related to social justice?</laugh></laugh>
Don Russell:	<u>01:04:38</u>	I guess I would ask the question, what is social justice?
dindria barrow :	<u>01:04:42</u>	Right on. I like that, that is a really good question. And now I'm gonna just come off the cuff and, and try to answer. Social justice has to do with how it affects humans and our ways of categorizing ourselves, our society, our government, our inequities. Did that make it more muddy?
Don Russell:	<u>01:05:17</u>	Well, what we're doing right now is we're squandering our freshwater resource. Our watershed is driven by precipitation. It has to be, it has to fall upon receptive land that will cleanse it, infiltrate it to recharge the aquifers upon which we depend for drinking water. And we're not doing that. And as a result, we're running out of this natural resource. And I was in California during the winter, and they were talking about the scarcity of water. And I came home, and I listened to some of the, uh, what's happening in this, in this, in our area. And we're headed the same way southern California is the lack of water means the lack of life.
Don Russell:	<u>01:06:10</u>	Yeah. So, somebody, particularly a some influential people, need to perhaps, preach to the choir as to what's really going on and what really needs to happen.
Richard McGinnis:	<u>01:06:27</u>	And I think to add to that is that social justice includes future generations. And what we're leaving are descendants. I mean, my greatest joy in life are my four grandkids. My greatest dismay in my life is worrying about those four grandkids. And the future that's coming because we have Clover Creek, the Colorado River, California. This issue is huge. And what we're ignoring is the generations that come after us. We really are. And to me, that includes people of all diversities, every continent. That future for the, I mean, it's dismay when I think about my grandkids and what's gonna happen, 8 billion people, and they all want homes like I have. And it's fair enough. I would too if I were them. Right. It can't happen. It can't happen.

Don Russell:	<u>01:07:27</u>	Well, we can't walk away from our watershed. We have to. We have to let our collective voices educate the next generation, because the present generation doesn't get it.
Al Schmauder:	<u>01:07:44</u>	How could you harness social justice or make it work for us? You know, social justice is a big deal. Can we use it like a horse to ride down the road with our interests? It can. Is it something that can power what we want to achieve? I don't quite understand the social justice thing, but the younger generation probably does. What are they, you know, if you had 10 people here and five young kids and five old kids, would social justice mean different things to that group based on age?
dindria barrow :	<u>01:08:21</u>	Maybe? It's really kind of nebulous. Right. But at the same time, what I'm hearing you say about how you can use it to fight for this cause. Yes. And I know that this is happening nationwide where, there are a lot of youth, and I say youth because I used to be a teacher. And so, anyone who's younger than me is a youth. Right. <laugh>, are coming together and especially in groups of black, indigenous people of color because of how it affects scarcity affects and impacts their life. So yes, I think it can do that. And I think that it can bring people together, whereas I think a lot of things are dividing us right now. So, I'm really excited to get this recording online so that people can hear from you about the details that are going to come down to future generations. And I don't know if, I'm just responding. I don't know if I'm answering anything particularly, but, I wanna know more about what I can do. So, I appreciate each one of you sharing what you have to with us.</laugh>
Al Schmauder:	<u>01:09:50</u>	You know? Where we miss the boat too. We probably don't use the modern communication tools that the younger generation uses every day. Now TikTok might not make it, it's got life limited life of own, perhaps, but that, that's what kids look at. We're not on TikTok. Instagram, I don't even put that in my machine. I don't have any Twitter. I don't chirp like the birds of anybody. Um, you know, I finally quit, you know, using my newspaper, but we aren't keeping up, I don't think, you know, where, what's AI gonna do to our watershed? You know and but who's going to carry this? Who's going to be smart enough to use the modern tools to communicate, like Don said, and educate with, with a generation which doesn't use what we used to use?
Fred Tobiason :	<u>01:10:50</u>	I think about a lot of times I drive right back and forth and look on how many people drive. They never were looking at the creek. Wonder why it's dry. What's going on? I look every time go hot, there's water. You know? That's so it makes,
Al Schmauder:	<u>01:11:11</u>	There's no interest. And why should they be interested?

Fred Tobiason:	<u>01:11:16</u>	Places where we, where it's all grown up now. It's, uh, where it's, where they, across the freeway and that houses that were taken out for the water for them and so on.
Richard McGinnis:	<u>01:11:30</u>	I think the Brookdale golf course.
Fred Tobiason:	<u>01:11:31</u>	Well, big floor there, A street, A street B Street
Fred Tobiason:	<u>01:11:39</u>	And B Street. Yeah. No, not too many people. We wonder why all that Why's all that vacant land is there now?
Richard McGinnis:	<u>01:11:49</u>	And meanwhile water comes in a bottle. I mean, why think about the creek, right? Well, I can get a coke or a flavored water or, I mean, that's really where they, that's where for them it comes from, right?
Richard McGinnis:	<u>01:12:07</u>	I mean, you know how lucky we are, we can actually turn on a tap water and have hot water and a flushing toilet that all requires water, right? and they don't think about it. Yeah. Comes from a bottle, the poop just disappears. <laugh>. Right.</laugh>
Don Russell:	<u>01:12:22</u>	But wasn't the bottle was taken out of the ground. Yeah.
Richard McGinnis:	<u>01:12:26</u>	They don't, they don't think of it that way.
dindria barrow	<u>01:12:29</u>	I think you are right. And I am even concerned about why the only time I am thinking about water is if it's raining really hard and I have to put a coat on <laugh> or it's flooding. Right. And so, what I'm just learning now is that I need to check when it's dry. Yeah. Right. That's what I need to be.</laugh>
Fred Tobiason:	<u>01:12:53</u>	You be aware, first of all.
dindria barrow:	<u>01:12:55</u>	Right. And then be aware of what I'm purchasing and where my water is coming from and how developers are using our land.
dindria barrow:	<u>01:13:08</u>	So, I wanna give you a last go around about that. Maybe a summary perhaps, or a final statement that you want to make about the watershed.
Richard McGinnis:	<u>01:13:27</u>	Well, as I said, I was becoming, I have become very pessimistic and cynical, but being with this group of people, I've become more optimistic. Seriously. When you can see other people that understand the problems, it really helps.
Don Russell:	<u>01:13:46</u>	And my view is that our problems could become a great opportunity. If we only learned what we have experienced in our lifetime. And people would utilize, build upon the knowledge we

		possess you. We gotta somehow pass it on. In 93, I kind of figured, you know, what the hell is my legacy? What am I leaving to my children? And quite frankly, the journey has been somewhat disappointing as far as conveying a knowledge of what Mother Nature intended, what we've done to her, and how we've blown the opportunity, essentially to learn from what we've experienced to assure that the next generation does a hell of a better job than we did, you know?
Al Schmauder:	01:14:38	Well, unfortunately, I think we passed the point of recovery. We can't go back and take people offline of the water. And the water right now is reducing our creek flows. And it's just going to get worse as more and more people populate. I thought a way to solve our problems are to get rid of the people <laugh> For some reason they don't wanna do that. You know, I worked for 30 years with kids to plant trees and make habitat and have a lot of fun doing it and spending money for fish ladders and, and getting fish bypasses. We spent millions of dollars, this kinda, for bypasses. We got eight fish bypasses, you know I'm gonna put a bypass around the dam that accidentally got destroyed. And, but without water, there's no habitat. Yeah. There's no aquatic. Like, there's no fish. So, you can forget about habitat restoration until you get water first. Because trees we plant 30 years ago along the creek are now dying. They, they grew well, the cottonwood used to grow really well. Yeah. Now they've died. So, where's your habitat? So unfortunately, I think it's a very bleak future for our watershed. I mean, I hate to be negative and I'm the most positive guy ever had. But unfortunately, I can't see a solution.</laugh>
Sherry Tonn:	<u>01:16:19</u>	I guess I'm still, I still have some optimism left. Now I've not had as much day-to-day experience as you have by any stretch of the imagination. But, you know, I think there is political will out there. And the trick is harvesting the political will where you can, and also bringing attention to this orphan, because this watershed is an orphan. You know, you started out that way in talking about the WRAs, the water resource areas. And Puyallup River has the Puyallup tribe, the Nisqually River has the Nisqually tribe, and we're kind of in that area in between as an orphan. And we just need more advocates for our watershed.
Fred Tobiason:	<u>01:17:17</u>	I say when they, when I've done a lot of aerial photographs of a whole, this whole section. This is I, and then when you look at how much stuff we have done over 20 years, 20, 25 years, and, banks have, we built the banks and or gone and <laugh>, and then you look at the land and that, and the sources put aside it's an impressive, really count see big dairy, that's a hundred acres. Yeah. Counting the land of the county head. And we been, yeah. So, on the park and prairie.</laugh>

Al Schmauder:	<u>01:18:08</u>	There's your sheaving people, all those people are involved in the sheaving work. We had lawyers, we had a land trust. The land trust got gobbled up by the Cascade Land Conservancy. And that got gobbled up by Forterra. And they moved to Seattle and we haven't seen 'em since. And now I understand Forterra might even have financial problems.
Sherry Tonn:	<u>01:18:30</u>	It's had its issues. That's for sure.
Al Schmauder:	<u>01:18:31</u>	I haven't heard exactly what's going on.
Sherry Tonn:	<u>01:18:33</u>	They got way out over their skis.
Al Schmauder:	<u>01:18:35</u>	Yeah. They got offline, start working on housing or something. [Sharing photographs.] Now here's Fred. He's, he's busy putting, doing welding, fixing the sides of our, of our banks, you know, and here they, here, this is a, we met people to, to work on open space groups. We had lots of adults working on that stuff. So now here's when Fred was really happy. He found some water. Fred finally, finally, he liked it. That's why he likes water. Right. He's got a girlfriend in the bubbles with him. <laugh>. Anyway, that's kind of cute. I wasn't gonna show it, Fred, but it was kind of cute.</laugh>
Al Schmauder:	<u>01:19:24</u>	Well, I got pictures of you too. I know you did <laugh> <laugh>. I got now Don, you know, Don deserves an award. He is the most stubborn, persistent, smart researcher. He doesn't give up. If he were a bulldog, he'd have teeth on both ends of his body. It doesn't matter what, you know, he so sticks with things and, he's smart. He can tell us what the chemistry is and explains stuff. If somebody wants to listen, you know, he, he, there's another smart guy is Dave Batker. Now Dave did work on the, on the environment. What's the value of environmental? Of Mother Nature? Yeah. That's nothing we didn't talk about. Dave Batker's a PLU student, but he started a company talking about why we don't value our natural resources because they have no dollar value. We value putting a warehouse, not a piece of land, getting taxes. But what if that piece of land were to stay there unfettered and hold our water and infiltrate it and give us our wildlife and birds. What's the value of that? How do you compare? So, Dave Batker started an environmental company consulting.</laugh></laugh>
Al Schmauder:	<u>01:20:41</u>	And Don would get out in the creek and do stuff here with these guys. This is Ponce de Leon Creek. When they, you know, they changed the creek. He's out there trying to train people here. He does. He's got himself a, some toys he plays with given how polluted the ground is. This was, we even went out on PLUs property here one time, some years Don and I, and, and tested the water coming out of the side of the hill that used to flow into

		here. So right up on there's a spring. Up here. And it comes out and then used to feed the water down here. Now when we moved the creek, we cut off that tributary, so we've done so many things here.
Al Schmauder:	<u>01:21:35</u>	Here's your former pipes under McChord Airbase. Now they wore out. So they say they had an emergency national defense issue and they put in new bridges, concrete bridges that'll last another 50 or so years or something. Anyway, Don and I, we've had a hell of a lot of fun <laugh> with Fred. We've had a lot of fun Muggs. We see him once in a while, but not as much. But, and even Sherry telling her people, it's been a good ride. Yeah. But the horse is getting tired and poisoned. Yeah. Been ready to die.</laugh>
Fred Tobiason:	<u>01:22:15</u>	You have to have to look at a whole big picture once in a while. Looking at how much stuff is lot. All the Naches trails. Too, too big, two 40 acres. Yeah. Sides set aside. Yeah. The creek is running free in there.
		<no, it's="" not="" now.=""></no,>
Fred Tobiason:		Well, I, well I think maybe.
Fred Tobiason:	01:22:37	And, uh, those places that, that, uh, it's, it's nice. Yeah. Well, it's, yeah, but it was always disappointing to me when the county went in, we hit that big project of, A Street, B Street. They did that big construction project and try to build the stream and its dry.
Al Schmauder:	01:23:05	Yeah, well it's, it's infiltration site actually. Yeah. It's for flood control.
dindria barrow:	<u>01:23:13</u>	Well, with those final comments, I would like to say thank you to each of you.
Al Schmauder:	<u>01:23:21</u>	Thank you for doing this.
dindria barrow		Thank you for sharing your stories and, I hope you enjoy the rest of PLU'S Earth Day and Diversity Week, <laugh>. Please listen, please respond, and email us at the Community Archives Center. Maybe we can do something.</laugh>