

RAND FISHER

Tape 1, Side 1

August 29, 1996

M.O'R.: This is Michael O'Rourke for the Washington County Historical Society beginning an interview with Rand Fisher on August 29, 1996, and today's interview is taking place in his office at the Washington County Soil and Water Conservation District.

I might start off just by asking you where you were born and when.

R.F.: Well, for whatever it's worth, I was born in Hauula, Hawaii, in 1947.

M.O'R.: Okay. And did you grow up in Hawaii?

R.F.: For six months. My father was in the military, and he moved around a lot, so I was all over when I was growing up.

M.O'R.: When did you first come to this area, then?

R.F.: Moved to Washington County in 1971. After I graduated from college I got a job here as a school teacher, and so came in '71 and I've lived here in Washington County ever since.

M.O'R.: You said you spent your first six months in Hawaii. Then where did you go next?

R.F.: Oh, well, you know, just the history of military moves. Went to Seattle, then Spokane, then Caysville, Utah, then we went to Cedar City Utah when my dad was in Korea, then we moved to Alabama, then to Ohio, then Boulder, Colorado, then San Bernardino, California, then back to Caysville, Utah, where he retired.

M.O'R.: Sounds like you were around a few places while you were growing up.

R.F.: Yes. And then while I was in college I got a job working for the Forest Service on a fire crew out in Eastern Oregon for

a couple of summers and decided I really liked Oregon, so I looked to come here.

M.O'R.: And where did you go to college?

R.F.: Utah State University. Geology was my major. Had a double major in geology and education.

M.O'R.: What did your father do in the Air Force?

R.F.: Well, during the war he was a pilot, and then - you know, as a kid you don't know exactly what he's doing, you just know where he works, but he was in officer training quite a bit; he'd be involved in training the new recruits coming in. Then he was also a relations or logistics relations between the Air Force and Thyukal Chemical Corporation in their production of missiles, and so he worked in that for quite a while, also. Some of the major things he did.

M.O'R.: Was he involved with Thyukal when the challenger accident occurred?

R.F.: No, he had retired from that long before that.

M.O'R.: And your mother, was she a housewife during most of this time?

R.F.: Most of the time.

M.O'R.: You decided not to pursue a military career it sounds like?

R.F.: Mm-hmm.

M.O'R.: What were some of your early interests?

R.F.: I was always interested in the outdoors and nature. I like people some, too, but I always enjoyed getting out in the fresh air and enjoying mountains, especially, but all those kinds of things.

As I said, one of the early jobs I got into was in the Forest Service and liked that, and while I was going to school, like a lot of people, you start off just taking general courses. You don't

really know what you're there for, you just know you're supposed to be in college, so I kept taking things, and when I took science class I kind of liked that, and I especially got interested in geology, and so I pursued that as a major.

I also like sharing information with people, so got - took education as a major, also.

And then when I had those, I looked what to do with it. Well, I know science, I know teaching, so maybe I'll be a science teacher - is what I got into.

M.O'R.: Is that what your first job out of college was?

R.F.: Yes.

M.O'R.: And where was that?

R.F.: That was in Beaverton.

M.O'R.: And that would have been '71?

R.F.: Right.

M.O'R.: And how long were you with Beaverton Schools, then?

R.F.: Oh, over 20 years.

M.O'R.: You decided to retire from teaching after that?

R.F.: Well, during the summers I also got a job during the summer with the National Park Service. I enjoyed that, and so I worked at Glen Canyon National Recreation Area and up on Lake Roosevelt, Coulee Dam, for a summer. Tippenogas Cave as a guide there with the Park Service, so I had four summers in that that I liked.

Then while I was teaching, Bonneville Power had a program where they would hire teachers during the summer. The idea was that they'd get some sort of miscellaneous work done they needed with some people who were skilled and trained because they're, you know, educated. But at the same time, it would also orient the teacher to some of the concerns that Bonneville Power had for energy conservation and fish habitat improvement and protection and

enhancement, so it was sort of a dual benefit that Bonneville Power got some work done they needed at the same time I got some training that Bonneville wants me to know about so I can share it with the students that I teach. I worked at it two summers, and after 20 years of teaching I thought I preferred that to going back to teaching after doing it for a long time. Kids are wonderful, but some of us just aren't to where we can feel like spending a whole lot more time with 180 13-year-olds every day as maybe a little more challenge than we're up to.

So when Bonneville Power looked like they had a job opening, I asked if I could get in there, and they said yes, and so I went to that, with the Fish & Wildlife Division and Bonneville Power.

M.O'R.: And when was that that you made that move?

R.F.: That was in 1992.

M.O'R.: Before that you'd worked the summers at Bonneville in energy conservation, primarily?

R.F.: No, in the Fish & Wildlife Division in their fish habitat enhancement - Environmental Education Coordinator, was my position there.

M.O'R.: For the summer positions?

R.F.: Yes.

M.O'R.: I see.

R.F.: And then I continued in it full time after that for a while, until they had their cut-backs, and I was told originally that, "We'll put you on temporary now, and we'll be able to get you full-time in a year." And then in a year the money ran out, and Bonneville was cutting back, so I was the last hired, first fired situation.

M.O'R.: So you worked for them for just about a year, then?

R.F.: A little over a year.

M.O'R.: Earlier your work at the national parks, was that when you were still a student?

R.F.: No, it was while I was a teacher. And what I did most of the summers is I have a small farm north of Hillsboro and work on that and raise cattle - you know, just a few of them, and some fruit trees and berry bushes and that sort of thing. Just have a small acreage out there and raise a few things out in the country.

M.O'R.: Do you have a family?

R.F.: Yes.

M.O'R.: They help you out a little bit on the farm?

R.F.: Oh, yeah. And did you get the farm about the same time that you moved to this area, or was it later?

R.F.: No - oh, we bought the farm in '78 and were able to build and move to it in '80. So we've lived in the same place now for 16 years.

M.O'R.: When you first came to the area did you involve yourself at all with the semi-urban natural areas that are out here in the valley, or were you primarily focused on pristine nature that was a little further out of town?

R.F.: Well, I don't know if I've been really all that much into nature. There are a lot of people who, you know, enjoy looking at nice scenery with trees and maybe birds flying over head, and you know, I'm not an activist, I just kind of enjoy peaceful somewhat rural settings, and I think a lot of people do prefer that, at least for a steady diet, to the noise and compactness of right in the city. Even if they like it in the city, a lot of people who live in the city and like it also like to get out in the country once in a while just to get a little change of pace and take a big breath and kind of let go of the tensions for a moment, and that's kind of where I am; just I like to do it a little more often than others, I guess.

M.O'R.: Well, I do, too. When did you begin to have an awareness of the Tualatin or the watershed out here?

R.F.: Oh, to be honest on that, you know, it's just something that sort of slowly accumulates, and to be honest it wasn't that I woke up one morning thinking, "The Tualatin watershed, everything flows downstream," and I'd had all the bits and pieces together as I taught science, and you know, part of what I teach in earth science is water cycle and water movement and soils, and that's part of what I taught, and just as you teach things you learn things and you just sort of get little bits and pieces of information that sort of slowly as they start to fit together you see that, hey, these aren't all disjointed, there's sort of a picture here about how things go and how little things that we might do that we sort of think are maybe not great but they're not hurting anything, when you accumulate them all together, you find that there are some problems caused by being careless, and I and everybody else needs to be responsible for the little things.

Primarily the big problems are caused by - at least for the most part; that's kind of what non-point source pollution is, it's by people just not worrying about little details. It's just kind of hoping that, well, it's not too big and it's not too important, so it doesn't matter, so I won't do anything. And unfortunately when you have 10 or 20 or 100,000 people not worrying about the little things, the little things become big things.

And so I and everyone needs to just be aware of those little things and take just a few more minutes or a little bit more time or another dollar or something to kind of keep things so that we end up with something that's useful and valuable and viable here in the Tualatin watershed, all working on that to help to keep it from destroying something that's really a wonderful resource that most of us like to get out and enjoy, so that it doesn't become more of

a headache and worry and concern and something we want to avoid. We want to make it something that's desirable to go to rather than something you want to get away from.

M.O'R.: And in terms of your own personal interaction with the Tualatin or other parts of the watershed, have you taken advantage of the recreational opportunities that are there?

R.F.: Not much. A large part of that is because - well, there aren't a lot of really easily readily accessible recreational opportunities on the Tualatin. You know, it's pretty much private landowners, and if you want to get to the Tualatin, you have to kind of sneak down by the bridge to get to it, and you have to have a canoe or a boat of some kind to get down and enjoy the river.

Now, that's changing because the Metro greenspaces just made a big purchase, so there's going to be a lot better access, and I think a lot more people will be able to get down and use and enjoy the river. I think they've just purchased one section, I think it's 120 acres, down near Scholls, and they're considering purchasing some other stream-side properties, which I think will make it much more available for a lot of people.

But no, I had not gotten down to enjoy the river because it's private property, and I can't be hopping over somebody's fence to go down and do something I want to do. So I just haven't really done much more than just once in a while up at Gaston I'd stop and look at the bridge. Oh, a few years back I got a class and was able to go up through the locked gates because we were with a group that had permission to go up to see Lee Falls and some of the upper Tualatin up there, which is totally different from the lower river, if you've been up there to see it.

M.O'R.: I haven't.

R.F.: It's night and day. You know, down here you have the lower river, which we all think of the Tualatin as that warm kind

of brown slow-moving thing that almost seems like it's something out of Alabama, only not quite the same. You get up above Gaston, and there's waterfalls, clear water, fish jumping and cold water; it's just a mountain wonderland up there. It's just wonderful and beautiful. It's a totally different river up there than the one we're familiar with. I was able to see that several years ago, and loved it.

I just wish that there was more access for that because that's again on private property and people can't go up to see it. But I understand the reason for that. There used to be public access, and when I went up it had been many years, but you could see where people had just left their garbage and litter and filth. Where people had had public access, people had just destroyed it. You know, blazed trees or cut things down and dumped garbage, and the timber company that owns the property just hadn't bothered to clean it up. They just decided, "We don't want any more of this, so we'll just block it off."

So they made it so there wasn't access to people, and that's a shame because up there by Lee Falls it's really close to Forest Grove, it would be easy access, and to me it beats the state parks like Lewis & Clark Park or several other state parks we have. I mean, that's high quality mountain recreation, beautiful place to be up there. It's just a shame that you have some elements - you know, it only takes a small percentage of people who are going to be careless and destroy something to mess it up for everybody, and that's what happened up there because the timber companies used to let people go up and use it.

M.O'R.: Of course the communities of Forest Grove and Hillsboro rely on that upper watershed for their water supply, too.

R.F.: That's right. They do. Now, this Lee Falls is below where they get their water from, but you know, if they would let

people get up farther up a whole lot, why, again they'd have the problems with their water supply - though, as you know, a significant part of the water supply is pumped down here from the Springhill pump station, and that's down below Gaston, almost to Forest Grove. That's where the pump the water out, and that provides water for the Tualatin Valley Irrigation District, and also a lot of the water goes up to tanks and is treated for Forest Grove, and I believe some of the Hillsboro water comes from there also, our drinking water.

M.O'R.: And it's mixed in, then, with water from higher up?

R.F.: Yes. They mix those two together, the water from the Tualatin and from Hagg Lake are the main sources of the water that comes in there.

M.O'R.: Now, you arrived on the scene, it sounds like, just about the time that the 20-some year effort to get a water project built up there finally succeeded; namely, the Hagg Lake Reservoir. Were you at all away of that at the time it first opened up, when they had the opening ceremony and actually started accumulating water behind the dam for the first time?

R.F.: I wasn't part of that ceremony, didn't participate in that. I mean, I was there when the dam was being built. In fact, oh, at that time before the dam was built, you know, they went and they had to move everybody out, and they cut down a lot of trees, and I was working on some funding for a youth group, and we got permission to get firewood, so we went up and got firewood where they were cutting it down, where the reservoir was going to fill up. We were able to get that and haul it out and sell it to raise some money for the youth group projects we had on there.

In the process I got my pickup truck struck in the very bottom of Hagg Lake, what's Hagg Lake now, because we were going through a creek to go over to get the wood, and my pickup truck got stuck

in the mud down at the bottom of the creek. It was Scoggins Creek, and there wasn't a bridge, you just got stuck in the creek. So I had to get somebody - it was quite a job to get the truck pulled out of there with this load of wood on it, but we got it out, so it's not at the bottom of the lake now.

M.O'R.: It must have been interesting to be in there when they were clearing it for the reservoir, then?

R.F.: Yes, it was. There was some pretty country up there, and you know, it's a real nice lake, but it was really beautiful land up there before, too.

M.O'R.: I guess that's the trade-off for things like that.

R.F.: And I was here after the lake started to fill up. It was interesting, I had to go down to take some summer classes down at University of California at Berkeley, and I was doing a paper down there on - it was really an education class, environmental science class that we had to pick a project, so I took as a project studying Hagg Lake and what the possible effects might be of that, how beneficial and harmful events might come from it.

You know, I wasn't really familiar with the area, but just from the research that I did and the literature that was down at the University of California Berkeley, looked at the geology and studied the maps, and it looked to me like the problem would be that there would be a whole lot of landslides because that land would be extremely sensitive to landslides if it got filled with water. It's just kind of funny that I wrote that on my paper that I turned in there.

That was in '73, before they had any water in the dam, and it was just a couple years later, you know, they put the road around the lake, and within two years the road had fallen in in a whole bunch of places and they'd had landslides on one side, and landslides the whole area they developed for picnics and everything, it

slid into the lake, and roads that slid into the lake, and everything was falling down right and left all around the lake.

They've got that to where I think the sliding has stopped and they've been able to stabilize that, but I'm just surprised that they hadn't looked at that before because I don't consider myself an expert structural geologist, but just from what's very evident in the geology manuals, studies of this area, you look at the rocks and it says "heavy landslides", you put water in there, if you don't get it graded off to the right slope to begin with, but apparently somebody didn't read their geology books before they made the dam.

M.O'R.: So that would have been the solution, then, to grade it more gradually so the slope would be more gradual into the lake?

R.F.: Yes. Mm-hmm.

M.O'R.: And instead that's kind of happened as a natural phenomenon?

R.F.: Well, yeah. When they've had landslides go into the lake, then that does some grading naturally because it's pulling it down, and then they go in with their bulldozers and scrapers and have made it a more gentle slope so it doesn't happen again, and it seems to have pretty well stopped sliding several years ago now.

M.O'R.: What other conclusions did you come to in your paper about advantages and disadvantages?

R.F.: Well, mine was just primarily about the geology aspects of it and that, you know, there would be some benefits to water quality and that you'd have sediment coming out, and that you'd have a more steady supply of water going into the river, which had a tendency to warm up. We've certainly had those beneficial results from it. Of course, the down side is that if there's an anadronous fish, they can't go past the dam, so there's none up in Scoggins Creek now. That was one of the primary drawbacks to it,

along with, you know, you destroy the lowland habitat, the land that was there before where there were deer and owl and farms and other things; that's all under water now, so now you have water skiing where you used to have farming and wildlife. And you know, there's good and bad on both of that. There's a whole lot more people using it and enjoying it now than there were before, certainly.

M.O'R.: So overall, looking back on it now, do you think that it was a net positive, though?

R.F.: Oh, I think benefits to the Tualatin Basin and the people in it, benefits far outweigh any disadvantages to it there. You know, it's not natural, so a pure, "I'm a hundred percent natural" person, well, they wouldn't like it, but I think there's a lot of real positive benefits to Scoggins Dam and Hagg Lake there, and again, there's drawbacks to all of them, just the kind of things that I told you about: you stop fish runs, and you cover up some valuable farmland and wood-growing land and wildlife habitat, and you sort of destroy the natural system, but I would personally see some benefits to putting in another dam or two in the valley.

M.O'R.: There are other projects on the drawing board, so to speak.

R.F.: They've proposed some. Most of them have been shut down, but they've proposed putting a dam in Patton Valley, I believe, and another one up on Rock Creek several years ago, but then they crossed those off. And I'm not familiar with all the details of how they reached those decisions.

M.O'R.: The Patton Valley one, that would be the one that was on the main stem of the Tualatin?

R.F.: Right.

M.O'R.: Just over the ridge from Hagg Lake?

R.F.: Essentially, right.

M.O'R.: Right. And I guess part of the problem there is that it would not only flood out trees and farmland, but part of Cherry Grove, also.

R.F.: Yes.

M.O'R.: Some people, I think, feel that it's time for that project to be built now. Hagg Lake, of course, did do a great deal for water supply and to augment the flow of the Tualatin, but ...

R.F.: Well, and it did considerable good for flood control, too. But what is that? I think - I don't have the figures; I think it's 14 or 16 percent of the watershed is from Scoggins Creek. So when we have floods like last February when people - do you know Wally Otto of the dam? Have you talked with him?

M.O'R.: No, I haven't.

R.F.: He operates the dam up there, and when he was doing that - first, on the dam - you know, when you've got a reservoir, he wants to control the floods as much as he can, but his first safety concern has to be that he has to keep the dam from blowing out. You know, he can't let the water build up so much that it's going to wash out the dam, so he has certain limits, standard limits, that when the water gets to this level, he has to let it go; he can't hold it anymore.

And he got - you know, he was holding back as much as he could, but when it got up to the level where it was prime level, he had to open the floodgates and let the water out as slow as he could, but he had to keep it so it didn't go higher so the dam didn't blow out. He got all kinds of swearing and threatening phone calls. Somebody called up, I understand, and said they were going to blow up his house or shoot his wife if he didn't shut off the water because they were causing problems in the flooding, and you know, what's he supposed to do?

It's just awful that people are so misinformed that they're doing that kind of thing when somebody's making tremendous efforts to try and control it as much as possible on there. But you know, people - when they've got a foot of water in their house, they get pretty upset and just want to figure there must be somebody to blame, and it must be that guy up there operating the dam.

M.O'R.: Right. Well, I guess the floods of '96 were extraordinary enough to really challenge the whole system.

R.F.: Well, and if we had more dams of course there would be a lot more control; rather than controlling 16 percent of the watershed, you'd control significantly more, and so you'd have - be able to reduce damage from floods considerably, I would expect, if we had more dams in either Patton Valley or Rock Creek or Gales Creek, wherever they might put one in the future.

M.O'R.: Of course, with the population explosion out here associated with a lot of the high tech industry moving in, et cetera, and just general urban growth from Portland, you have more need for water, too.

R.F.: Oh, yeah.

M.O'R.: I guess when the Scoggins project was originally built, there was all this extra water, and even that got snapped up fairly quickly.

R.F.: Yeah. So there is now and will be a significant need for more water in the future.

Somebody from the State at some meeting - I wish I could remember who it was. It was sometime last winter. Anyway, they were saying that others - consideration for water because there are a lot of people who are against putting more dams here, and you're not certain how much water you're going to get from that, saying that we'd take more water from the Willamette River and that a likely proposal would be to take some water out - oh, somewhere

near I guess Wilsonville is where they were thinking of taking water and putting in a six-foot pipe and pumping that up to the Tualatin Valley to use for drinking water up here.

[End of Tape 1, Side 1]

RAND FISHER

Tape 1, Side 2

August 29, 1996

R.F.: Some people think the Willamette River, you know, they just wouldn't want to touch that water, but you think about people in Mississippi and the New Orleans' drinking water system is - you know, the average drop of water you get out of your tap in New Orleans has been through at least 17 sewage treatment plants before it gets to your tap, and who knows how many industrial plants along the way. So it would certainly be cleaner than that.

But then I was just hearing some reports on the news a couple of weeks ago where some group, I'm not sure who, some environmental group is catching and studying fish on the lower Willamette between Newberg and Oregon City, and they're finding that - oh, I think 85 percent of the fish have deformities on them, that there's something wrong with their fins and they're not growing properly. They don't know what it is. They think it might be chemicals or something. But if the fish are having deformities and birth defects and growth problems, I'd want to be real careful about drinking that water, bringing it into the Tualatin Valley. Of course, it would be purified, but you know, killing the bacteria doesn't necessarily clean up everything that could cause problems, if there's toxins in there.

So you'd want to look at that and really make sure it solved the problems in the water before you brought that in as your water source. First you'd have to recognize what it is, which DEQ is saying the water's fine, but when you've got all those fish having problems, you tend to wonder if that's really as good of water as it ought to be.

M.O'R.: Of course the Tualatin itself has suffered from serious water quality problems over the years.

R.F.: Oh, yes. And it's, you know, had a bad reputation, also, but it certainly has improved over the last 10 years, gotten much, much better than it used to be. It used to have high bacteria levels, and that's one of the real benefits of the Scoggins Dam is we're able to keep the water level up during the summer and keep the water temperature down, which is really important.

I've seen photographs of it back in the 50's when the Tualatin River wasn't there. I've seen pictures where the total flow of the Tualatin was - you know, it was 12 inches wide was how wide the river was. It was basically a ditch down the middle, and it was only going because somebody had an irrigation right and so they were running water down so he could pump it out to irrigate. It was just dried up because everybody pumped it out. There wasn't much to begin with, and they were pumping it out for irrigation, and it was gone. There wasn't a Tualatin River in the summer in the late 50's. And it's certainly much, much better than that, than it used to be.

With the sewage treatment that's gone in, all the systems used to be very inefficient, and now USA is collecting all that and processing it, and it's gotten better and better as that has happened, and their new plant that takes out - well, I wouldn't do it myself, but I think that probably the water that comes out of the - most of the time the water that comes out of the Rock Creek treatment plant is probably cleaner than a lot of water in some of the back Eastern cities that's going through the drinking water systems. I don't know, it's probably not quite that extreme, but it's really cleaned water going out of there.

And we also have larger flows, as you know, because of the - that's one benefit of the people coming in is we get a lot more water, and a lot of our water comes from the Bull Run system into the drinking water systems for Beaverton and Tigard, and then when people turn on their faucets or flush the toilet, that water goes through the treatment plants and ends up being dumped in the Tualatin. So we have higher volume in the river because of sewage.

M.O'R.: It's a transfer from Bull Run to the Tualatin via people's toilets?

R.F.: Right. Not the nicest transfer system to think about, but it works.

M.O'R.: I've heard figures that in the summertime that USA's effluent accounts for perhaps as much as a third of the total flow down the Tualatin.

R.F.: Right.

M.O'R.: And of course USA has had its own troubled history with respect to the Tualatin.

R.F.: Oh, yeah.

M.O'R.: They were born right about the time you came to this area under the building moratorium that was slapped on Washington County by DEQ, I think it was - or at least by the State of Oregon, and I guess that forced the consolidation of a bunch of small sewage districts. Were you aware of ...

R.F.: I wasn't really following that at all when it happened.

M.O'R.: And then USA got a bunch of federal money that was available under the Clean Water Act in the 70's to build many of these new facilities that they now operate.

R.F.: Collection systems and treatment plants, yeah.

M.O'R.: Right. But then they found themselves in trouble again by the mid-80's, even though they'd probably just barely finished constructing some of these plants and they were supposedly

state-of-the-art technology, then they wound up hauled into court by a group down in Lake Oswego that was suing them because they were violating the terms of their discharge permit, and also I think simultaneously sued the Environmental Protection Agency to enforce the Clean Water Act on the Tualatin. Were you aware of those events when they took place?

R.F.: I wasn't involved in those or really a party to any of those at that time. I mean, I read some little news article about it, but I wasn't involved in it at all.

M.O'R.: And of course that led to them taking a look at the phosphorus especially, and you mentioned that earlier. And now they've got it down to at least close to the limit - or maybe they made the limit that the DEQ wanted them to make?

R.F.: Well, I was at a flow management meeting yesterday, and I guess the phosphorus is okay, but they got real high on their nitrates this month, and they don't know where it's coming from. There's some ammonia problem, and they can't tell where the ammonia is coming from, but something has come in.

If I'm remembering it right, it seemed to be coming in almost on a regular basis towards the end of the week on a Thursday or Friday, something would come into the Rock Creek treatment plant which would wipe out all the bacteria that are supposed to remove ammonia from the effluent, and so then they'd have high ammonia going out which was greatly exceeding their limit, and they'd have to shut down everything and hold it in storage, and they were trying to bring in bacteria cultures from their other plants - you know, from Durham and the Hillsboro plant, and just get bacteria cultures and rush them in so they had bacteria to process the waste because something was coming and they can't find out what it is.

As I understand it they have a permit that says that they can exceed the nitrogen required levels - in the month they can exceed

it 15 days. Kind of a funny limit, but you can exceed it 15 days and you're okay, and if you exceed it 16 days, then you're out of compliance. And they have already exceeded it 15 days, so they're working their tails off to try and not exceed it one more day before Sunday.

But I understand the fine if they exceed it is something like \$30,000. They have already brought in technical help and specialists and put in people overtime trying to fix it. They've spent a couple of hundred thousand dollars this month trying to solve that problem. I mean, they just want to get it solved. They're not worried about the fine; that would be small. If they could pay the fine and have it fixed, they'd love to do that, but they've put in several hundred thousand dollars this month just trying to figure out what is coming in here and what's going wrong with it because they can't find out where it's coming from. And they've got tests out on their feeder lines, so if they can figure out where - if it's coming from some factory or someplace, what's coming in here to cause this. They just don't know. So they're doing some sweaty intensive investigative work to try and figure out what's going on right now in their treatment plants.

M.O'R.: I guess they're in a position now where they maybe have to take some of their discharge standards more seriously as a result of increased vigilance on the part of everybody?

R.F.: Well, my perspective is that they want to keep them down low because I think a lot of the people want good water quality, and certainly they want a good public image, and it isn't a good public image if you, you know, "Let's just push it as far as we can," you know. They want to keep it clean, and they want to look like they're trying to keep it clean for public image. And they don't want to hurt the fish or make the algae grow or anything like that, at least a lot of the individuals that I know there

certainly want to do it because it's the right thing to do. Maybe there's somebody who has some other motives on there, but I think that at least most people that I know of are just concerned to get it done because, you know, they want to keep the water clean and keep people healthy and make the fish grow better in the river and that kind of thing. At least that's the experience with the people I've worked with over there.

M.O'R.: I think that USA started off with a black eye as a result of that lawsuit, probably, and has responded to it.

R.F.: Well, and that lawsuit actually did the river, I think, quite a bit of good because of the - I don't know what it was, a million dollars or something they put in the endowment fund, which supports water quality projects every year through their grant process, which has been really helpful. We've gotten some of those here in the District, and a lot of other groups have gotten grants that have helped out water study and purification and water quality enhancement and education efforts a great deal. So a side benefit from the damage caused by it originally has had a long-term benefit.

[End of Tape 1, Side 2]