

No
Tape 2

RAND FISHER

Tape 3, Side 1

October 7, 1996

M.O'R.: This is a continuation of the interview with Rand Fisher at his office in Hillsboro.

As I was saying before we got the tape rolling here, we had kind of talked in somewhat general and historical terms about your own life and some of the issues out here in the valley, but maybe today we could talk just more specifically about some of the work you're doing here as part of the Conservation office.

R.F.: Sure.

M.O'R.: Why don't you start by telling me a little bit about - I see you have a button that says, "Clean rivers start here." Is that this organization's button?

R.F.: No, it's a button from Portland, but we work on the same kind of things.

M.O'R.: Okay. Well, tell me in general what kinds of things you work on and what kind of programs you have going.

R.F.: Well, here in the Conservation District, of course the Conservation District has a long history of - and Conservation Districts around the country - a long history of working to conserve resources. The title is Soil and Water Conservation, and that's what they're trying to do, to make it so that those resources are kept in good quality and quantity so that they're a value for natural and production uses, and that's what the Conservation District does is to work to improve that. And they traditionally have been involved in rural activities, and that's pretty much where the Washington County Conservation District is still pretty much the - as it were the designated management agency for agricultural or rural activities. Whereas USA handles things

inside the Urban Growth Boundary, the Conservation District handles them outside of the growth boundary, except for forests, which are under the Department of Forestry. So we're the management agency for that.

Up until a couple of years ago, the District was rather limited in what they could do because they had no funding, no budget, other than - oh, the State I believe gave them about \$2,000 a year, so that was their whole operating budget for everything. And so it kind of limited what they could do.

But as the problems became more evident and more specifically addressed for the Tualatin River, there was a grant through EPA to Oregon Department of Agriculture that came to the District to essentially work on developing a water quality management plan for the rural area, and then to essentially implement it, to get people in the rural areas to better manage their lands for water quality. And that in broad general terms is what I've been trying to do and the District's been trying to do for the last two years now is to work to improve water quality, to try to get towards meeting the DEQ water quality standards, you know, for temperature and turbidity and chemicals and bacteria and all the problems that exist, try and get those down closer to levels that are good for fish and for wildlife and for drinking water and for irrigation and all those different kinds of things.

So that's in a broad sense what I've been doing. Now, the specifics of that - well, the important part is that a lot of people need to know more about what the difficulty is and how individuals contribute to the problem. I mean, that general term "non-point source pollution" or problems, everybody's involved in it, and you know, everybody - it can be little things that you don't even notice, and oftentimes that's the problem that I work on is getting people to be aware of what kind of things they're doing

that contribute to water quality they didn't have any idea was a problem before.

And a lot of times it's people who kind of think, "Well, what I'm doing is not great, but it doesn't really make a whole lot of difference because it's a whole big basin and a big river, and a little bit doesn't make much difference." And what I work on is trying to get people to realize that a little bit does make a difference because there's thousands of people and tens of thousands of animals here, and any one of them by itself doesn't matter much, but that's the same thing as any disease; one germ doesn't matter, it's just when your body gets full of a whole bunch of them, it can kill you. So we have to try and fight them one at a time to get people to avoid damaging or polluting the river on their own. It's not something where you can to like one big factory and put in some kind of pipe control on the end so nothing comes out. It's just all the little tiny things here and there in all the rural areas around the county. Of course, the same thing happens in the cities, too, but there they're not dealing so much with livestock or erosion off farms or those kinds of things.

M.O'R.: So are those the two major impacts that farming has on water quality?

R.F.: Erosion, and one of our major concerns is animal waste from cattle, horses, sheep, pigs, llamas, alpacas - you know, all the different animals that people have out in the rural area.

Now, of course it was not long ago that dairies were a major concern and major problem in the area. However, those were addressed through the Department of Agriculture in previous years, before I came on here, and they had a lot of people with the Department of Agriculture working with dairy operators in the area. And any of those operating now, they have what's called a CAFO, confined animal feeding operation, permit.

They have to have a special license that defines particularly what they do and how they do it and how they manage their waste, and they have to store it in accord with certain established criteria, and for the most part dairies are meeting those rules and oftentimes exceeding them. And so they're for the most part not a significant contributor to water problems in the basin because they now have essentially put in treatment plants at all their locations, and they're managing them in a way so that they don't damage surface water quality.

But the part that I work on is the smaller operations that aren't as big as dairies that don't have those licenses where people have one or two or fifteen horses or alpacas or whatever, sheep, running around, and getting people to realize the problems that can come from that and to manage their livestock and the animal waste so that it doesn't end up contaminating the water.

M.O'R.: And how does that work, generally?

R.F.: Well, it's just a process of education, of contacting people. And of course I try to use broad spectrum as much as possible. I write a monthly newspaper article, try to reach people.

M.O'R.: "Go with the Flow," is that the title of it?

R.F.: Yeah, "Go with the Flow." And we work with the Extension Service. We have a quarterly publication that's sent out through the Extension Service to all the rural residences in Washington County. About 16,000 are on that mailing list, and so quarterly I write, and in conjunction with others we write articles to inform rural landowners on issues, and so that comes out quarterly. Different topical kind of things appropriate to the season is what we try to get. Like the next one coming out they're just reviewing, that will be about erosion control for the winter; people getting cover crops on so it doesn't erode as much during

the winter rains. If they have some grass growing on a slope, then it's not going to be near as much of a problem as if they left it bare.

So that's one of the things we talk about. So erosion and animal waste are the primary ones. Of course, there's other things that go along with that: nutrient management, working to help landowners, whether they're big commercial farmers or just somebody having a few acres in a pasture, getting them to manage their fertilizer so they don't use more than the plants can use, so there's not excess that's going to run off.

That of course improves water quality, and when it's done properly, with soil analysis and properly adjusting the spreading so that it goes in just the right place at the right rate, then it ends up saving a lot of money for the landowner because they're not wasting fertilizer, and it makes the plants grow better because they get the amounts that they need, but not excess. So it's just like a healthy diet for you and me: If we eat the right things and don't eat too much we'll be a lot healthier, and the plants are healthier if they get the right amount of fertilizer but there's not excess that's running off. So it saves money and makes the plants grow better and keeps the water cleaner.

M.O'R.: Are pesticides an issue, too?

R.F.: Well, they are, but they're not really part of the program that we're working with here. Pesticides have separate regulations through EPA and the Department of Agriculture. And of course if I'm talking with somebody if they have a question or concern or wonder about pesticides, or if I have any reason to believe that it needs to be addressed, then I'll talk to them about that and being careful with it, but that's not the major focus of what I'm working on at this time, and we certainly want people to - well, just like the fertilizers, don't apply it when you don't

need it, don't apply it when it's going to be washed off into the streams. Only apply it so it's going to do what you want done. So use the minimum amount possible and put it in the right location, the right place, and use an appropriate pesticide. Unfortunately, a lot of people sometimes just aren't as knowledgeable as they need to be to use the right pesticide at the right in the right amount. So whenever that issue comes up, why, I try to help people to better understand what to use and how to use and the right volumes and so on.

Of course, with fertilizers and pesticides and anything, we want people to be especially careful, the closer they get to the stream, the more careful they need to be for water quality. If you do something, you know, 2,000 feet away from the stream, if it's not bad, why, there would be a lot of filtering that would happen before it gets to the stream, but if you're just 15 or 20 feet from the stream, and you don't do things just right, then whatever happens it's going to wash into the stream right away, it won't be filtered by soil or plants or anything else. So the closer you get to a stream, the more careful people have to be.

M.O'R.: I was just talking to a farmer this morning about the pesticide issues, and he told me that he hires an etymologist to tell him exactly when to spray and what to do, and that with the benefit of that consulting he has actually cut his pesticide use sufficiently to pay the consultant's fee and then some.

R.F.: Yeah. Well, that's what a lot of the commercial farmers have found is that along with doing good things for the environment, they end up saving dollars and making their crops grow better, and that's what we like to show to people as examples of that, that it works, you know, in a lot of good ways.

Again, I think that sometimes the difficulty comes in, well, what are sometimes referred to as hobby farmers, people who perhaps

work full-time in the city in some office or something or factory, and then they come out and they just work weekends or evenings on the farm. Maybe they've got 10 or 15 or 40 acres or something. But sometimes they haven't had the time to spend to learn all the details and to check out if this is just exactly the right time to spray or something, so they just kind of do things in a general way, which unfortunately can sometimes cause some problems because they don't have the details on how to work it.

You know, it's kind of like an intern doing brain surgery. You know, if you know how to do it right you can really do a good job, but if you go out there with good intentions and you don't have the skill or the tools or you're not doing quite the right thing, you can end up doing a lot more damage than good. You're probably better off leaving it alone if you don't know what you really ought to be doing on there.

M.O'R.: What kind of reception do you get when you go talk to people? There's a stereotypical picture of rural farmers that they're a fairly independent lot, and maybe aren't as convinced or committed to environmental restoration as they are into maintaining their independence and being able to run their operation they always have.

R.F.: Mm-hmm. Well, it's - they're people, like everybody else, and you've got all variations on there. There are people who - well, I've had doors slammed in my face and been told me to never come back, and I've had people who welcome me in and give me cookies, and you know, we just have a nice visit and talk to them about things, and it's everything in between.

The really obstinate, at least so far, have been very rare. Very few of those. Understandably, a lot of people are just a little bit cautious and shy because, you know, "I'm from the Government, and I'm here to help you," is something people are a

little concerned about. You know, what am I going to force them to do or to pay or to buy or to stop doing that they're already doing. They're a little concerned and leery about that. But in talking with, you know, anybody who's willing to talk with me, and that's the majority of people, you soon find out in the most part that they have the same objectives as we're trying to put across, it's just that they don't quite understand how to do it or what the means are, or maybe like a lot of people, they've got a whole lot of other commitments, and it's just a little lower on the priorities than we need to have it. So we kind of boost it up in their priorities where it ought to be. So we give them some information and a little encouragement, on what needs to be done and why, and we've got a lot of people who are going in the right direction on implementing the good kind of practices.

Like I said, you'll always - no matter what you're doing, you'll get some people who are just not going to do anything cooperative and get away with whatever they can, even if it's harmful. But most people are working towards doing the right thing, and a lot of people who are living out in the country, they want to keep the situation good out there. They like the plants to be growing and the water to be clean, and a lot of them recognize that they can make that a little bit better by doing what they do on their land, and particularly when we can show them how it really doesn't cost more money in the long run, it actually saves them money in the long run, why, most people can be pretty cooperative in that.

M.O'R.: When we were talking before we started the tape you mentioned Measure 38 and Senate Bill 1010 and then - was it the Conservation District's own water quality standard?

R.F.: Well, Senate Bill 1010 basically is a sort of a statewide measure that essentially has local watersheds responsible

for cleaning up the non-point sources in their area, and a specific part of that directed towards the Tualatin Basin has essentially the highest priority in the state for cleaning up and getting it in better shape.

Now, there's over 900 water quality limited stream segments in Oregon now, but the Tualatin has got the first and the highest priority for working on non-point source improvements here.

And under Senate Bill 1010, there was designated that the rural Tualatin Basin was to have developed a water quality management plan, and that water quality management plan would direct what kind of things would need to be done or avoided to improve water quality from the rural area. And the water quality management plan was set up with particular Administrative Rules which applied just to the Tualatin Basin, not to other watersheds in the county, but just to the Tualatin Basin. And those rules were established by a committee starting in 1994 and working up through 1995. That committee of 12 people, with others like secretaries or advisors, technical advisors and so on, but the basic 12 people on the committee were primarily rural residents of the Tualatin Basin. I think all but three of them were residents of the rural Tualatin Basin. We had one from Unified Sewerage Agency, one from Portland, and one was a nurseryman from over in Canby, but he served on the Board of Agriculture, and he's of course very much into agriculture since he's a nurseryman over in the Canby area.

M.O'R.: Can you name this board?

R.F.: Name all 12 of them?

M.O'R.: Yeah.

R.F.: I'd have to get them up on my screen here. I could get a list in just a moment.

Dan Logan - do you want just the names, or what do you want?

M.O'R.: Oh, you could give me just a thumbnail description of who they are. Dan Logan, I guess, is a forester?

R.F.: Well, no. He works in timber, raises Christmas trees and forest trees. He's also a member of the Soil and Water Conservation District, was elected to that position. So he served on that board. And Dan also is the district representative to the Tualatin Watershed Council, so he's very much involved in that.

Linda Gray, she lives on River Road and has a few horses of her own, lives right next to the river, and she's concerned with that. She also works in the Extension office, so she's involved with education and making people aware of things around the county, so she's involved in that. She's a rural resident and also has education ties.

Jim Love is a producer. He lives out north of Forest Grove.

Roy Malensky operates Oregon Berry Packaging, and he raises his own berries and he buys berries from other people, and he processes berries. So he's very much involved in commercial production.

M.O'R.: The former one you said was a producer. You mean like agricultural producer, like a farmer?

R.F.: Yes.

Rob Park, he's the nurseryman from - from Gresham, I guess, not Canby. Gresham is where he's from.

Larry Suza, he lives out on Minter Bridge Road, and he farms. I'm not sure what crops, but he lives right next to a stream, and he does crop production each year.

Mike Wolf, he's from Salem. He's on the Oregon Department of Agriculture Natural Resources Division, and he was the ODA link to this committee, so he was attending all of them and helping them set up.

Let's see. I've got some of these out of order here.

Wes Jarrell from Oregon Graduate Institute was our technical advisor.

Well, apparently that's not the whole list I was looking for. Let's see if I can find the other one.

[Pause]

The others - let's see, one's a dairy farmer; Krahmer is his last name.

I'm sorry. I'll look it up and mail it to you when I get the list.

Q Okay. That's fine.

In terms of drafting the plan, was it a tough process?

R.F.: Yes. People wanted to have an idea of what was required and what was needed, and they wanted to - you know, all of them wanted to have water be all right. There was some sort of fear of urban environmental interests pushing things so far that they - you know, pushing things too far, that the people in the city don't realize that this is their business and they have to make a living at it, and they didn't want their land taken away from them and their ability to make a living from their land because that's their investment, that's what they do, that's where they work. You know, it's just like somebody wouldn't want - if somebody owned a business, they wouldn't want to come and say, "Well, we'll take half your office space out because we want to do something beneficial for the community, make it a better place to live, and they don't want half their land taken up to make the better place for the community; they've got to produce on it. So they were concerned about that.

But they also recognize, you know, that there are problems and they've got to address those, and they want good water, and most of them would like to have fish in the streams, and they want their water to be clean. They recognize there's problems, of course,

downstream from that, but a lot of them have lived here a while, and they like it to look clean and look better, and they recognize that if you've got dirty water, that's health problems for people and for livestock, and it's just a problem for everything. So they'd like to have good conditions.

The strongest debate or conflict was one of the members was Mike Houck from Portland Rivers Council, and he of course had a little different perspective than the agricultural producers here in the Basin. He was kind of looking at things differently, and he wanted to establish a variable riparian protection area that would range from a minimum of 50 feet up to or exceeding 350 feet that would be a buffer zone between streams, and the landowners didn't want anywhere near that much because they looked for some data that would show you could get by with less than that.

So Mike always wanted more protection and more environmental benefits, and the rural landowners wanted to keep that not quite so extensive as Mike had wanted on there. So those were the primary debating points, though in the end Mike didn't get nearly what he wanted, but I think he and all the others left with a cordial feeling towards each other that they respected each other and that there had been some progress made. Mike didn't think there had been near enough made, but he recognizes that what was developed was a whole lot better than what was there before, which was nothing. And so he recognized there was progress and benefits from it, just not as much as he'd like, and the landowners I think for the most part felt that this should be adequate to protect water quality and still allow them to be productive in their farming operations.

M.O'R.: On that issue of the riparian zone, is it just an issue of taking land out of production, then? That's the main concern that farmers have about it?

R.F.: Yeah, I think so. Well, you know, throughout the country there's the property rights issue is pretty strong right now in some people's minds, but the primary reason for that is they say that taking their land out of production is what they don't want to have happen because that's where they make their living, and they require the land to do that.

[End of Tape 3, Side 1]

RAND FISHER

Tape 3, Side 2

October 7, 1996

M.O'R.: Right now we have this statewide ballot measure about fencing off streams so there wouldn't be access by livestock to streams. What's the status of that type of issue here in the Tualatin Valley? I understood that maybe there had already been some steps taken along those lines.

R.F.: Well, the Tualatin Basin water quality management plan that was developed by this group did require that your stream areas be protected effective January 1998, that would be several years before the Measure 38 bill would go into effect. But we already have that as part of the plan that the near-stream area must be protected. Generally speaking what that would mean is that where there's livestock they'd need to be fenced out of the area.

Now, if you get into the details of what good management is, there are many places where careful, prudent, productive livestock managers can let their animals near the stream and to use it, but they have to monitor closely, put them in there for a short time and get them off while they still leave at least three inches of grass cover on the ground, and they don't destroy the area. They're just not in there for very long, and they just get in at the stream banks. They're fenced, and they put them in for a short time, carefully managed, and they take them out again.

And though some people find it hard to understand, it actually improves water quality because that makes the grass grow better if they're carefully managed, which allows for more filtering, it keeps particles and erosion out of the stream better than if it's just left to go wild because you let it go wild, then a lot of times you'll get things growing up like wild blackberries or trees

growing up that shade so much that you don't have ground cover. You know, it's just bare ground underneath real thick shade trees on there. And when that happens, you're on a slope, you get a lot more soil erosion, a lot more things washing into the streams.

Ideally, cattle, if they're properly managed, they can serve the same function that was done 200 years ago by elk and deer and bison and those kind of wild animals that actually benefit the stream somewhat. Unfortunately it's a much smaller percentage of livestock managers than we'd like that are doing it in that way. A lot of times there's either not the time or the ability or the knowledge or the desire to do that kind of good careful management. But if they want to and take the time to do it, you can use that area effectively.

But for the most part the protections under the measure that we have would be that a 25-foot wide strip is left to protect water quality, to act as a filter, as it were, to filter out particles and also let shrubs and trees grow to shade the stream to keep the water a little bit cooler on there. So that's the livestock management part that's in our Tualatin Basin water quality management plan.

As you're probably aware, that is quite a bit less than Measure 38, which as I understand it would be a hundred-foot minimum with buffer, and it could be a whole lot more than that, and in fact if Measure 38 were to go into effect in the Tualatin Basin, I was just out last week with a landowner who runs cattle in a low area. Actually the area gets covered up with water during the winter, but he grazes cattle there all summer in the flat area next to an old part of the river channel, and if Measure 38 were to go into effect, as I understand it he would essentially lose all his land. He's got 30 acres, and it's all so low that that would be covered by this Measure 38. So he stands to lose 30 acres

that's no longer his to use. I mean, he pays property taxes on it, but he wouldn't be able to use it for anything after that if Measure 38 were to go through.

Now, as I understand and as the Oregon Department of Agriculture believes, and we'll have to let attorneys decide if Measure 38 passes, but it's our belief that with the Tualatin Basin water quality management plan, that falls under one of the provisions of Measure 38 which says that if an approved water quality management plan is in effect, then Measure 38 does not apply. So that leads us to believe that we do have an approved water quality management plan recognized by the State and Department of Agriculture and DEQ and everything else that since we have an approved plan, then the provisions of Measure 38 would not apply and our own basin-wide water quality management plan would be what would be used to determine what needed to be done for water quality.

M.O'R.: Even though it's less stringent?

R.F.: Yes.

M.O'R.: Do you think Measure 38 is overly stringent, then?

R.F.: Well, I don't want to get political, and I'm not supposed to express, you know, opinions as a public employee. My personal opinion, I recognize that if you go in and take pictures and see the abused scenes, it's awful, where people have been careless or selfish and ruthless, and cattle have destroyed watersheds and near-stream areas and all those kinds of things. And Measure 38 would essentially seem to correct those situations.

But there's also, as I said, some land managers and livestock owners who have been doing an excellent job of managing their land, actually improved water quality with livestock. There have been a great number of them who have been working to try and cooperate. You know, these things take money, they take time, they take

knowledge, and there's a lot of landowners who have been working to slowly but progressively, as fast as they can with the resources, improve the management of their lands and working with groups like Oregon Trout or Northwest Steelheaders or some others and Conservation Districts around to implement plans and protections to improve water quality, improve fish habitat. There's been a lot of cooperation and some positive feelings there. And I fear that Measure 38 - well, if it passes it will be much worse, but it already it has damaged some of those relationships, that there's a feeling of, "I don't trust these people," you know, by some landowners. I think there are some problems on that.

The other thing I don't like about Measure 38 is that as I understand it one of the provisions is you've got to fence stream banks, and one of the provisions says that so there won't be quite such a burden on landowners, all the funds from GWEB, Governor's Watershed Enhancement Board, and the - it's something about stream side restoration - anyway, it's a funding source that helps to protect water quality and improve stream banks and that sort of thing.

All the funds from those will be directed by priority to stream bank fencing under Measure 38. So any good things that these organizations were doing before will have to be foregone until all the streams get fenced, and I don't think that's the highest priority. Many of the watershed councils in the state are funded through GWEB, and as I understand it there wouldn't be any money for that, it would all go to stream bank fencing. A lot of very important and critical restoration projects to restore stream banks, to reforest slopes, to put grass on slopes where there's not cover so there's less erosion, a lot of those important kind of things, as I understand it, wouldn't have funding to do because the priority no matter what would be building fences. So you're not

able to discern what's the best thing to do with the money; it goes to fences.

And as I say, it creates a lot of harsh feelings for landowners, and I can see where, particularly if someone has a long stretch of stream in there, if you've got to take away a hundred feet of land on both sides that they can't use anymore, land that used to be their most productive because out in Eastern Oregon that's the only place things will grow in the summer is near the stream, and you take away that land, the landowner can't do anything with it, but he's still supposed to pay taxes on it, and I see if it passes that there will certainly be lawsuits coming up about taking away property rights and so on.

Now, the good parts about it, I see that if it were to pass that if it is as it seems that a water quality management plan will exempt people from being required to just follow exactly what Measure 38 says, it can go by a water quality management plan, I would see there would be a big push and rush by an awful lot of landowners and districts and counties to develop water quality management plans, and that would be site specific to their area to be what was needed in that area, to recognize the problems and the limitations and the needs of an area, and if it were just going to serve as a motivation to get essentially watershed-specific water quality management plans, I would see some real benefit in it. Then with their own plans they could overcome the problems of Measure 38 and develop something that fit in the area but helped water quality at the same time. So in that respect I would see some benefits from Measure 38.

M.O'R.: Do you think that that was the measure's intention, that it would in fact foster development of regional water quality plans, but if worse came to worse you'd have this sort of one-size-fits-all kind of template to protect the streams?

R.F.: Well, I can't speak to what their intentions were. I haven't talked with anyone, don't really know on that. But I'm very glad that they did put in the provision, and apparently they thought ahead to do that, that they allow that if you have a localized water quality management plan, then that supersedes Measure 38. So I assume somebody was thinking something about that or they wouldn't have put in that provision, and I'm very glad that they did, so it does - much as I don't like about Measure 38, I think that if it motivates everybody to make and execute water quality management plans, then I guess that would be the benefit of it. It's kind of like a big ax hanging over everybody's head and gets them to do what would be valuable to do with developing water quality management plans in the local area.

M.O'R.: Now, these water quality management plans that would supersede the measure, the DEQ does have to sign off on them, or some state agency?

R.F.: Yes. And again, I don't know if it's Department of Agriculture or DEQ that would be the primary one to form those. I would assume it would be the Department of Agriculture. I would assume that those basin plans would be made in much the same way we did here, that Soil and Water Conservation Districts would essentially work with citizens in the community to develop those plans. Then those would go before public hearings for review, and then they would go to Department of Agriculture for review, and then they would go to attorneys for review and clarification, and if it passed all those, then I would assume the plans would be approved, if they met water quality standards as well as all legal criteria.

M.O'R.: I read a column of yours in which you were fairly upbeat about environmental restoration of the Tualatin, where you said, you know, that it's definitely going to happen, and it's

happening now. And I've also heard the opinion expressed on the part of some that with respect to certain criteria that people are looking at relative to water quality - phosphorus, I guess, being the main one, that we already have the river cleaned up to the point where further progress isn't really possible. We're as clean as it's ever been because of - in the case of phosphorus, anyway, we're at the point where it's just the natural level that comes out of the soil is what we find in the river.

What do you think? You were upbeat about the cleanup of the Tualatin; do you think we're there yet? Do you think we have a ways to go?

R.F.: Well, first, for someone to say that we're as clean as we were before, it's as good as it was, you know, back in 1820 or something, no one can say because we don't have any data. We don't have anybody who can even tell us what it looked like then. We can talk to some people who kind of have some conjectures about what it was 50 or 60 years ago, but you know, there's no real data on that. So we can speculate and conjecture. I very much doubt that we have water to the level of purity and quality that it was back before European settlement here in the basin.

I'm upbeat because I see a lot of people wanting to learn about things, wanting to do the right things and learning how to do it and implement it, making some measures that end up cleaning up the water. But I think that there's going to be - you know, as long as we have people living in the valley there's going to be room to improve, and with the greater numbers of people we have in the urban area, there's going to be more pressure - just where you have more people, you have more things going into the rivers, into the water, and so I think that's going to be a constant demand to always be working to clean that up and get it better.

As far as the phosphorus, I know we have some natural sources of phosphorus that are probably going to keep our phosphorus levels higher than what is currently established by DEQ as the maximum standard. I think we're probably going to be above that most of the time. But there are still a lot of places and ways that we can reduce the phosphorus that gets into the river, and I think over time that can be taken down.

Of course, one of the things is that once you get phosphorus in, particularly when it's attached to sediment particles, you're going to have phosphorus going back - even if you had pure water going over that sediment that's already in the river, that's going to be picking up phosphorus for years, slowly dissolve it and take it out, and carry it out of there. So I don't think you're going to have any snap turnarounds on all of a sudden no more phosphorus in there. Even if we've go no more coming into it, it's going to take a long time to clean up just what's lying in the bed of the river.

I'm aware that along with improvements, now we've got lots of small livestock owners who aren't managing their waste properly. We've got places in the county where there are septic tanks leaking, and it's putting all kinds of things in the rivers and streams that we don't want to have. We've got fertilizer that sometimes people find it's just easier to put on a whole bunch, and that way they know their crop's getting enough. Don't worry about it too much, just put on a whole bunch because it doesn't cost much, and that's washing off and getting in the river, and we need to get people more careful with that.

So yes, I'm feeling positive that things are improving, but there's more that people can do on that, and there's certainly - you know, we can do things to improve the water temperature, get more planting for shade along streams; though there's a lot of it

now, there can certainly be more. We can surely reduce erosion, and in reducing erosion we're going to reduce phosphorus because that's where most of the phosphorus comes from, or a lot of it comes from, is from soil erosion. So we can improve the turbidity in the water as well as improving the phosphorus and chemicals by cutting down on erosion. So I think there's still a lot that can be done; we're just starting to head in the right direction.

M.O'R.: Now, your job is focused on the rural part of the county, but I wonder what your own opinion is relative to where the greatest strides can be made? I mean, you hear the farmers on the one hand saying that it's because of the larger urban population that surrounds the Tualatin now, and the urban people say, "Well, we've already done a lot. We've spent a lot of money on our sewer bills every month and so forth and so on, USA has cleaned up. The problem is really with the agricultural community." And of course the forestry community is in there somewhere, too. Do you have any sense of, you know, what piece of it each of these activities has?

R.F.: Oh, I think there's been some studies. I can't quote percentages of where they think percentages of certain minerals or elements are coming from, but I think that, you know, as people look at that they're missing the point of non-point source pollution problems because what people - in doing what you were just talking about, they're trying to say, "I'm not the point source, the city is the point source, or the forest is the point source, or the farm is the point source."

Well, it doesn't matter if this group of things altogether produces more. If you - whether you live in the urban area or the agricultural or the forest area, if a person, if one operation is contributing to the problem, that's what needs to be addressed and not worry about, "Well, I'm the only one who raises mushrooms, and mushroom growers don't contribute much to the pollution of the

Tualatin." Well, maybe they don't because there's only one mushroom grower, but if there's phosphorus or nitrates or bacteria or something coming off from his raising mushrooms, that needs to be addressed. And if it's somebody saying, "Well, I build 50,000 square foot houses, and there's not much erosion that comes from 50,000 square foot house developments because there aren't many of them around," it doesn't matter if there's something that comes from there, so that needs to be addressed.

And so I don't really like to see people try to categorize and say some other group is doing it more. Very likely may be that some other group is doing more than different groups. But whether it's the top or the bottom group, it's the individuals who are doing things that contribute to water quality that need to adjust and modify and correct those so we have water quality improvement, whether there's 50,000 of them doing it or one of them doing it. It's all a part of the problem, so they need to work to address those problems and improve it so that we end up with better water quality. And you know, the old saying is anytime you're pointing a finger at somebody, you've got at least three fingers pointing back at yourself, and I like to avoid finger-pointing and have people recognize that there's more coming back at them from their point of view than whoever they're pointing to when they're saying that somebody else has the problem and they don't.

M.O'R.: Another one of your columns that I read talked about - and this is just sort of an anecdotal kind of story, but it talked about the discovery of a new waterfall up in the high areas of the Tualatin?

R.F.: Yeah.

M.O'R.: Were you along on that trip?

R.F.: No, I wasn't. I just heard about it myself. I haven't been up there myself since then.

M.O'R.: It was written it the third person, but I wasn't sure if ...

R.F.: No, Rob Bauer just told me about that one.

M.O'R.: I should have talked to him about that, but I missed it.

I'm starting to run out of questions here. Do you have any other things that you think we should talk about vis-a-vis the Tualatin?

R.F.: Well, I think we've kind of hit on what my main feelings are, that everybody needs to be aware of their impact on it. And of course I focus on rural, but urban, also, people need to be looking at what they're doing individually and take the time to learn how that is affecting water quality in the streams around them because we all - you know, there's water coming down from someplace to us all and going down from us to someplace that we're all affecting others by what we do and we all need to be aware of what our contribution to water quality problems are and work to address those as best we can, and I think if we can get an attitude for people to face up to and recognize what things they need to correct, even though it will take some time or a little bit of money to do it, why, that's what we need to work on.

I'll be honest with you, since I started working here I raise a few steers out north of Hillsboro, and I thought I was doing a pretty good job, and I still think I was in the past, but as I learned here, I found a few things I can do different and better, and since I'm - just about the time I started learning about them, I thought, "You know, before I can go out and tell other people what they ought to be doing different, I'd better improve my own a little bit to get up to what I'm asking them to do." So I've been working on that, and I think we've got it in pretty good shape up there, but there wasn't anybody that came and told me that. I just

felt like I shouldn't be going off telling people to make little improvements that aren't required if I haven't done them myself. So that's what I worked on doing. And maybe other people don't have quite the guilt motivation to do that that I did, but I would hope that everybody would look around and see what things they can do, whether it's major or minor, to improve their operations a little. And hopefully they can find, as I did, that when you do it for water quality you end up getting a lot of other benefits also from it. There's side benefits in reduced costs and better production and better animal health, and it looks nicer, and things are just better if you do those.

M.O'R.: Do you think most things fall in that category, that there really are other positive benefits besides the main objective?

R.F.: Oh, yeah. I think anything that the Conservation District is promoting, that there's multiple benefits. You know, there's one particular reason we do it, but there's multiple benefits in other areas that are really beneficial. Most of them will make it so that in the long run it will be more productive, cleaner, easier to operate, better for wildlife or fish or whatever.

M.O'R.: And cheaper.

R.F.: And cheaper, in the long run.

M.O'R.: What sort of things did you change on your farm?

R.F.: Oh, I just used my pasture rotations a little better. Rather than just kind of letting them go, I looked at it so that we keep the pasture grasses growing so I get more production, but it also means that the manure is better used by the grass out there, and I end up with better grass production on it, so I have lower hay costs because I manage my pastures better.

I used to feed my cattle pretty much in the open. I mean, I had a little cover over the place where I put the food, but their back ends were out in the rain, and so we had manure being rained on all winter. Well, that's technically by the rules, as long as I haven't piled it up, if it's not too concentrated it doesn't have to be covered up, but you know, when they're eating there all the time it gets to be concentrated, and I decided that shouldn't be going into the rain, so I built a roof over them so that it will pile up and I can just scoop it up and store it like I want to do, and also I can manage my manure much better, and it makes it so I can use that. Instead of all the nutrients washing off in the winter and causing problems, now I can spread it out in the spring, and it makes the grass grow better.

It's also a lot nicer operation for the cattle because they're not in mud so much now. It's just healthier for them and easier for me to manage, and everything just works out a lot better because of it. And I started using soil tests so that I know what my pasture needs, and then I buy the fertilizer I need by the soil test rather than just, you know, "Okay, it's time to spread some fertilizer." I don't have to spend near as much for fertilizer, and I found out there were some things I needed that I wasn't putting on. So my grass is growing better, and I spend less on fertilizer, and the water quality's better.

So it's certainly working out for me, and I don't see why it wouldn't have benefits for other people the same way.

M.O'R.: Do you think it's been a plus that you have your own little farming operation in terms of being able to talk to other farmers?

R.F.: Oh, yeah. You know, I'm certainly not in the range of commercial farmers who make their whole living at it, but when I'm talking with people about problems in their livestock or what they

need to do a little differently, they can recognize that I've been out up to my ankles in manure sometimes, and I kind of know what the situation is and that I'm not, you know, completely removed from it. We're able to relate, and I understand more what their problems and their difficulties and the circumstances they need to deal with are. It's a little closer than somebody who doesn't have that kind of situation that they're involved in.

M.O'R.: A question that just occurred to me with respect to the water quality management plan is what kind of teeth does it have? What sort of enforcement provisions are there?

R.F.: Well, first the strong admonition from the Department of Agriculture and from our Conservation District and elsewhere is that we want this to be an education program. The rules went into effect in January 1996, and we don't want to go out and start punishing people because they're breaking rules they didn't know anything about. We want people to learn what they should be doing and what are the best management practices and ways they can accomplish those, and give them some time to do that.

But when it is determined, and I think it might by a year later - you know, after a year people should know what's going on, and particularly if it's somebody that I've contacted individually and told them about something they need to change or modify, if they don't make those changes, then there's provision for some severe fines on there. We want to make something appropriate. We don't really want to do it as punishment, throw them in jail and make them sweat, so much, but we want something that's going to be so that they decide, "I'd rather do what the rule says rather than pay this fine or have this punishment." So a deterrent is what we're trying to work on there.

And I haven't worked with any of those yet, but I understand those provisions for violations can be up to \$1,000 a day for violations of the water quality management plan.

[End of Tape 3, Side 2]