ANDY KLEIN

August 29, 1996

TAPE 4, Side 1

M.O'R.: This is a continuation of the interview with Andy Klein on August 29th.

A.K.: Go again?

M.O'R.: Yeah, go ahead.

A.K.: Yeah, and then that thunderstorm does create pollution in the river, and that's the one that we're aiming at. We're not trying to solve problems in the wintertime when the rivers are up and the water's cold, the dissolved oxygen is high and so on and so forth. And that's the baby, and, but as I say, it had been overlooked, I think, to some degree, to a large extent possibly, as not being a problem. But it is a problem.

Tires, just as kind of a little sideline here, automobile tires are manufactured with a certain amount of cadmium in them, and cadmium is a heavy metal that causes nervous tension, high tension in people. It goes into the river down here, and you take the water out downstream a little bit, and you treat it. You don't get the cadmium out, and people are drinking that stuff, and so we want to control it.

When we develop a water source for a community, we have a list of heavy metals that we have to have the water tested, and EPA has set limits on how much you can have in milligrams per litre on each of these metals, and we have to stay under that limit. And it's a good thing; I suppose some of these things are to some degree cancer-causing.

There was a good symposium that was put on down at Oregon State - it's been, oh, I suppose 20, 25 years ago, maybe longer - about heavy metals in the environment, and it's written so that the average guy can understand it, and everybody ought to read the darn thing. It's really - it can be a little frightening. Lead, zinc,

so on and so forth, they're all a problem, can cause some real health problems.

M.O'R.: You mentioned Metro a while back, and of course there's the urban growth boundary also, an attempt to, I guess, slow down development in certain areas.

A.K.: Instead of going this way, they want to go that way.

M.O'R.: Right. Up instead of sideways.

A.K.: Up instead of sideways, right.

M.O'R.: I was wondering what you think of that whole process. Do you think that's something that's well conceived or is going to be successful?

A.K.: I grouse about that one, too, every now and again. As a matter of fact, on this Council Creek project we're dealing with it, and we think that for industrial growth in Cornelius, they need to expand the urban growth boundary and get it out so we can get a little more industry into Cornelius. It's an incredibly complicated process, and it's not easily done.

But yeah, I agree totally, I guess, with the land use planning concepts because when I was first City Engineer in Forest Grove, I had to be amazed at some of the land planning that was done. It was nothing more than some lines drawn on a piece of paper, and this is where we think the highway ought to go, this is what we think the street pattern ought to look like, so on and so forth.

Now, that to me is not land planning. That's just one of the little things that falls out of good land planning. But land planning, you need to look at all the physical aspects of the area you're dealing with, the topography, the stream flows, you know, rainfall, winds, all of this type thing, the characteristics of the area. You also have to think about the politics, the economics. All of these things interplay, and until you've looked at everything really well, I don't think you have a land use plan.

Then here locally, I'm not sure I really agree with establishing a real tight urban growth boundary. I can see the sense in it. You have all these utilities, and you know, people go out here on the fringe someplace and take 100 acres and develop it into houses. All of a sudden you've got to connect that up with water and street, sewer, storm drainage facilities and so on and so forth, and if you have those facilities that are in the community and you have land within the community, or maybe even have some land in the community that's older sections that maybe ought to be taken out and revitalized, maybe that's what you need to do first.

So maybe it's not a bad idea. I don't agree with, I think people want space. When you start getting down to 2,000 square foot lots, 2500 square foot lots, and we're talking about that now, I don't think that's right. I think that you get people too close together, and then you begin to have emotional problems, this type of thing.

I have a third of an acre, and my neighbor has a third of an acre, and I have this brand new little miniature Schnauzer that my kids gave me that I didn't want, and she was in the kitchen the other night yipping, and my neighbor's bedroom has got to be 100 feet away, and Kathy called and said, "Would you please keep your dog quiet so I can get some sleep?" I said, "Good Lord, it didn't even occur to me." But that's spread out as we are, and she was still concerned. What happens when you've got 2,000 square foot lots? My house is 2,000 square feet, for goodness sakes. Yours probably is, too.

M.O'R.: That's true, although it's more than one story.

A.K.: Right. Well, I don't know. I enjoy taking care of a third of an acre, and I wish I had more time to do it, but yeah, I do enjoy it, and I enjoy the open space around my house and the freedom to do what I want to do on that property, it's great.

M.O'R.: So you're not sure this vertical concept is going to be ...

A.K.: I don't like it. No, I really don't care for the idea. When I get ready to retire, maybe I would enjoy living in a four- or five-story condominium complex, but I'm not sure that's the case. I don't think so.

M.O'R.: Well, I think I feel somewhat the same myself.

A.K.: But you know that in defense of that, I have to say, too, that right after the war I was in Yokohama and Tokyo, and we made quite a number of trips back and forth across the Pacific hauling troops back and whatever, and I would have to say in Tokyo that as crowded as those people were, they had done some incredibly neat things, conceptual things with their little plot, with their houses and their little rock gardens and things like this, and honest to pete, it was nice. They had some I think maybe some really nice lifestyles, and whether they enjoyed it or not I don't know. I didn't speak Japanese, so I wasn't able to communicate. But it sure looked good.

M.O'R.: So maybe it's partly just a a perception or what you're used to, too.

A.K.: I think that's true probably.

M.O'R.: Well, of course, the other thing about the urban growth boundary is that I've heard that the farming communities are - if you are a farmer, you can do it differently depending on what point in your life you're in.

A.K.: That's exactly right.

M.O'R.: If you plan to continue farming, then you're all in favor of being outside the boundary. But if you want to sell the farm, then you want to be ...

A.K.: This Ralph Van Dyke that we're dealing with out here, he's right next to Cornelius, and he's an older guy, and I just

would be willing to bet he wouldn't mind selling off two or three hundred acres at a nice price, and yeah, he could sell the farm then and retire and have an incredibly fine lifestyle. Yeah, you're right.

M.O'R.: Depends upon where you're at and what you want to do with your land, I guess.

A.K.: Sure. Well, when I came to Forest Grove, of course, there were no constraints of that type. And being City Engineer, I knew lots of people around town that were just waiting for their property to be next on the list, you know, for development, to sell it and they were going to make a bundle and maybe retire, whatever. Yeah, I could name you a lot of names right now - and they did, some of them did. Some of them waited too long probably, and they got caught outside the urban growth boundary, but that's the way the cookie crumbles, isn't it?

M.O'R.: Well, you've seen a lot of changes in this area since you first came here, and of course your own business, I suppose, has had to adjust to some of these changes as well.

A.K.: We have changed the kind of business we do probably a half a dozen times or more in the last 20 years.

M.O'R.: Really?

A.K.: Yes, absolutely. We were doing nothing but studies and reports when I first started. Then suddenly, you know, like the one with the water quality management plans for Oregon, we did some other studies of that type - suddenly I find myself in the land surveying business, which I never really want to be in, but there was lots of land development work to be done. We got into that. Now we're doing lots of site work for industries and a lot of municipal work and things of this type. It just changes; it seems like about every seven or eight years, you're in a different business, so to speak.

M.O'R.: The clients change as well?

A.K.: Yes, your client base does change. Definitely.

M.O'R.: Your clients in the beginning when you were doing the reports and studies tended to be governmental bodies?

A.K.: More governmental, right. Deanna just finished a study for Squires Electronics on storm drainage, and we're doing quite a few of those now. And what we're telling people on storm drainage is before you buy a piece of ground or you want to develop it or whatever, maybe you better spend a couple thousand bucks and let us take a look at it for you because you might be faced with putting in - you've got, say, a couple acres and you're going to put in a lot of hard surface, impervious surface - you may be faced with increasing the size of the city's storm sewer, and maybe you don't want that expense, and you're going to buy the land for maybe $100,000, you're spend $500,000 putting new storm sewer from point A to point B.

We ran into this very thing on six acres that we'd just completed the work on it just Monday, and all of a sudden this fellow is going to buy this property, industrial property, $50,000 bucks an acre, and he's going to spend about $250,000 just putting in off-site improvements to satisfy the City of Cornelius. He's not going to do it. Better he knows now, having spent some money with us, than to have gone ahead and bought the land and plunged straight ahead, and then to come to find out, "Wow, I've got to spend a quarter of a million dollars here on just off-site." This is before he gets on-site to do his thing. So that's the type of thing we're doing now. We're advising people very strongly to take this tack, do it this way.

M.O'R.: So you started off with more governmental clients, and now you're actually ...

A.K.: We're almost totally in the private sector, with the exception of a few jobs we're doing for the City of Cornelius right now on storm drainage again.

M.O'R.: But it sounds like that a lot of your work in terms of water quality focus, that that focus maybe remains, it's just that it's shifted from the government down to the individual. Would that be fair to say?

A.K.: Yeah, I think that's a fair statement.

M.O'R.: Well, that's interesting that that's the way the business goes.

A.K.: Oh, yeah. We're keeping very busy, and of course a lot of our busy is because of government regulation, probably most of it. And I'm not so sure but what - Washington County right now, and maybe the state of Oregon, I don't know - we do get outside of Washington County quite a little bit; we're doing some work in Nehalem right now and some other areas. But most of it is the result of regulation.

M.O'R.: So you help private parties cope with the regulatory requirements?

A.K.: Yes. When Dan Keppin was with me about four or five years ago, he was commenting one day, "You know, I'm spending more time talking on the telephone and working out procedure trying to figure out these government regulations than I am doing design," that he was trained to do like me.

And I said, "Let's go back and take a look at some of our timesheets and kind of get an idea how much time goes into dealing with regulation, how much goes into actually sitting down and running out computations or drawing plans or whatever." And you'd be amazed: 85 percent on government regs, 15 percent on engineering. That's right.

M.O'R.: That ratio holds today?

A.K.: I don't know, but I presume it probably does, yeah, although I think today that it would be more - probably more like 50/50 because we know the regs a lot better now, and you know, this is what we were talking about a while ago, you have this deal where you work up onto a plateau, and then everybody kind of works along here, and then all of a sudden the regs change again, and you go up to the next level. And I think we're on that plateau right now where we can make some money because we know the regs, they're in our minds, and we can get the design done now quickly, and we can go through - and with computers, my goodness. If we had to do all this stuff by hand, there would be no way. But with computers, we can take the government regulations - and I can spend an hour showing you the regs. They're very sophisticated. I mean, it's not, it's just not as simple as you might think. And most of this stuff goes into a computer. If you had to do it by hand, you'd be hours. The computer programs we have, the same computer programs that the County has and the DEQ has, the City of Portland has, to check us, and when the stuff goes into them, they just throw it in the computer and they doublecheck us, and we're on our way. Very sophisticated.

M.O'R.: Well, I'm starting to run out of questions here.

A.K.: Yeah, I've got to get home, too.

M.O'R.: I was just wondering if there's anything that you haven't talked about so far that you can think of that it might be worthwhile discussing.

A.K.: On the Tualatin Basin? Well, I don't think of anything just offhand.

One thing I wish they'd do, I think we touched on it the other time, was that I think we need another dam in the Tualatin Basin for flow augmentation and all. The Tualatin Phase 2, which was the construction of a dam either at Gaston or upstream on the Tualatin

at the Mount Richmond site - the Bureau has looked into both those, done extensive examinations. Either one of them would probably be good sites, but they take an awful lot of - the Mount Richmond site doesn't take as much land, agricultural land, as the Gaston site takes, but they - and the Mount Richmond site would probably be a good one. But it would really help.

But you know, when you put in a dam of that type, like Scoggins, what's happened is - we touched on this last time, too - you go from a different type of farming, the dry land type, and people are pumping out of the river, and they're using whatever water's available in the river. There were not many storage dams around the valley at that time, small dams. We've designed and constructed about 50 small dams. But see, they only impound maybe anywhere from 100 acre-feet down to four or five, which isn't much water. Take Scoggins, I think, was at 40, 50,000 acre-feet of water, and that's what you want.

But now when you do that, you intensify your agriculture. You go to farms like Glen Walters has out here, these nurseries, they use a lot of water, and it's a whole different type of farming. You can see them going in. Lots of strawberries, berry farms, other types of nurseries, and we've been doing a lot of work on those, as a matter of fact. Grapes, vineyards don't take any water. Orchards generally don't take any water. But you do, you get into a higher type of - a more intensified type of agricultural production, and more water use. Employ more people, too, I might add.

M.O'R.: You said that you designed and built several dams?

A.K.: Quite a few, yeah.

M.O'R.: On local streams?

A.K.: Yes.

M.O'R.: On the Tualatin itself?

A.K.: No, I don't think there's any dam on the Tualatin *per se*. You know, it's kind of like the Nehalem River; there's no dam on the Nehalem River either, or the Miami or the or the Trask or the Tillamook, I don't think any of those coastal streams. The Trask has the Barney Reservoir way on the headwaters. But as far as migratory fish are concerned, I don't have a problem with this. I think the damn dams off. There are plenty of good dam sites here in the Tualatin Basin. If the person wants to put his mind to going out and really looking for them, they're there.

The Soil Conservation Service had a program back a few years ago. As I say, these programs all have numbers, and they investigated quite a few sites in the Tualatin Basin where you could store a thousand, 2,000, 3,000 acre-feet of water, which is a pretty nice chunk of water. I don't think any of them were built.

Then you brought up the flood control thing that Pinky Walsh, General Walsh was trying to initiate here in the valley for four or five flood control dams. Those were good sites.

But then the Gales Creek site up here, the dam would have gone right across Gales Creek where the Warren bulb farm is located, would have flooded quite a bit agricultural land as well as caused the relocation, a substantial relocation of Highway 8, and that's spendy. And it would disrupt a lot of families. And then I hadn't realized until we got into damming the Wilson River way up in the headwaters in the Devil's Lake, and that's when I was City Engineer. Now that would be a good impoundment. The Fish and Game were worried about the migratory paths of the elk and the deer up there. Didn't seem like much of a problem to me, but it was a problem to the Fish and Game. And the only way we get that dam site was to create a rearing pond in the - this is for municipal water, but we would create a rearing pond in the dam, in the reservoir itself for trout and salmon and this sort of thing to be

released downstream, and then we had to release - I think it was a minimum of two cubic feet per second, which was, you know, that's close to 1,000 gallons a minute would come out of that reservoir for keeping the downstream flow augmentation, keeping it downstream, and that's reasonable. That was reasonable.

But if you talk to the people at Water Resources, the streams, the Tualatin River is heavily over-appropriated. You know, if every individual that has a water right, if they exercise them all at one time, shoot, there wouldn't be any water in this valley at all. It's pretty ugly.

Right now, I'm a certified water rights examiner for the State of Oregon, and if you came in and said, "Andy, I want a water right. I want to pump some water out of the Tualatin. Gosh, there's all kinds of it down there." I'd say, "Fine, we'll file for you, but you're not going to get a water right. The only water that you're going to get is from November until April."

And you'd say, "Shoot, I don't need it then. I need it in the summertime when I'm growing my crops or whatever."

And I'd say, "Forget it; you're not going to get it."

They've cut them off, and that's it. They should have done it a long time ago.

They adjudicated the water rights on the Tualatin back about 1951 or -2 or -3, along in there, because there were a lot of old water rights that weren't being used. But I think most of them are in use now. We have a water master, Jerry Rogers, who's in the valley here, who's an incredibly good man and knows the system, knows the water rights very well, and you might want to talk to him, too. He's really up to speed. But he's administering the water rights as they should be administered. He lives here in Forest Grove, incidentally.

M.O'R.: Now, when you built these smaller dams - I assume they're smaller dams?

A.K.: Yeah, they are small.

M.O'R.: Was this for private clients then, too?

A.K.: Yeah, every one of them was for a private entity, and it's mostly for farmers for irrigation.

M.O'R.: And so these would be dams on some of the streams that flow into the Tualatin for the most part?

A.K.: Mm-hmm. Well, we've done some over - well, I wouldn't say that. Some have been down on Salt Creek in Yamhill County, Ash Swale, down there, quite a number. Sandy Farms, we've done two dams for them, and we're raising one right now. So, no, they haven't all been right here in the Tualatin Basin. The last one we did here was for John Kinky. It's a high dam. It's about 75, 80 feet high, something like that, impounds 100 acre-feet. That's not a lot of water, but it is a lot of water if you don't have water.

M.O'R.: Is Kinky a farmer?

A.K.: Yeah. And he farms, oh I don't know, a couple hundred acres up there, maybe more, three or four hundred acres. He's a good farmer. He really knows what he's doing, and I think he did the right thing. Now, he has water. Glen Walters, he won't even open a nursery until he has water, and he recognizes how valuable it is, and you have to have it, and he'll spend the money to get it.

As I was going to say a while ago, you talk to the people at Water Resources Department in the dam safety division of that department - they're the people we deal with primarily. Well, we deal with all of them down there because we do water rights and final proof surveys and all of that. But the consensus is that we need more storage because you can impound those flood waters that

run off in the wintertime and hold that water and use it in the summer is a neat way to do it.

But when you get into the channel of a flowing stream, a perennial stream, it's not so darned easy to get a dam. Back 10 years ago - if you'd come in today and, or if you'd come in this office in February and said, "Andy, I want you to design a dam and I want a, I want it ready for next summer," I'd say, "Right on, we can do it for you." And we could go out and do our mapping, do a design, submit a plan, submit what they call a primary application for storage and a secondary application to appropriate the water, and you'd have it in short time and you'd be off and running. You come in February of 1996 and ask me the same thing, and I'd say, "By probably 1999 or 2000, we might, we just might have a water right for you, a dam."

M.O'R.: So the process includes getting approval to build a dam for storage. Do you have to have a preexisting water right on the stream that you're impounding?

A.K.: No, to appropriate stored water, you don't have to have that. But you do have to go through all the environmental hoops, absolutely, and that's Fish and Wildlife, Corps of Engineers, State Division of Lands, boy, you name it and you've got it.

[end of side one]

M.O'R.: So it's a little tougher these days?

A.K.: It's incredibly tough, and so we can tell a guy when he wants to know how much it's going to cost, and I say, "I can tell you when we get done because we just don't know what hoops we're going to have to go through." We get it started, and the counties - it's kind of interesting. In Washington County we have to go through a type 2 procedure, and in Clackamas County all we have to do is file a land use compatibility statement is all. We have to file a land use compatibility statement in Washington County. That will get us started, but we have to go through a type 2 procedure, which means they have to post the property, and we deal with the staff. But if they get a complaint, then we go to a public hearing. So Washington County's a little bit different, but the work we're doing in Clackamas County, no problem.

M.O'R.: How do you feel the Washington County officials have done with respect to responding to these environmental challenges and federal regulations, et cetera?

A.K.: Boy, that's tough. You know, I know Linda Peters. I've known all the Chairmen for quite some time back because we deal closely with the County. But I've met most of these people by taking an active part in their political campaigns, and I think that's reasonably important. I like to be able to go to the courthouse and if I want to go talk to Linda Peters or Bonnie Hays or Wes Mylenbeck or Clayton Nyberg was in there at one time - he just passed away here recently - I want to be able to go in and say to the secretary, "I want to see this person for a few minutes," and "What's your name?"

"Andy Klein." And [she'll] go in and come back, "Yeah, he'll see you." And we can go in and chat for a little bit, and that's convenient, and I don't ever go around the staff. That's bad news. If I have something that's really bothering me, I talk to the staff, and if we think we need to talk to a commissioner, we go together to talk to the commissioner. No way do I ever go around them. That's not good.

And to answer your question, how they've responded, I wish - maybe it's not a very good answer to your question, but I kind of wish that the politicians, the elected people, were really in closer touch to what's happening at staff level, and maybe it's too much for them to assimilate. I don't know, but I just have a feeling they might be a little out of touch, that staff might be running just a little bit ahead of them.

M.O'R.: I suspect that might be true in general.

A.K.: Yeah.

M.O'R.: The staffers are the ones that have the stuff on their desk every day and are looking at it, you know, in some detail.

A.K.: You know, Linda Peters, I suppose she's paid a fairly substantial sum, and I don't know if she's a full-time Chairman or not. I'd like to feel that the County Commission could be almost full-time. I'm not that close to them anymore; I don't know. But I know staff is full-time, and I know staff is thinking, and I know some of the rules that have been set down, like the - what's the name of that one, it has to do with the meetings. If the Commission's going to meet, they have to notify people in advance. They have to, you know, when they get together as a Commission - there's a name for this. Come on, you can help me. The such and such meeting law.

Anyway, staff doesn't have to go through this procedure. They can hold meetings when and as they please and develop whatever they want to develop. Of course, if it's administrative rules they're passing, then they do have to go the Commission and they have to be approved by the Commission.

We just received a new set of administrative rules from USA on the design and all of sewage treatment facilities, storm water facilities. I just have to wonder how much input there was from the Board of Commissioners, and I have to wonder how much input there was from the consulting engineers in Oregon or other people who have to use these documents. Now, we knew they were coming out, so I can't say I didn't have notice. We did that. But we did not - and that's negligence on our part, we did not take the time to really go through and study those things word for word, piece for piece, you know, and so I guess we deserve what we get.

But maybe the Consulting Engineers Council should hire a full-time civil engineer to sit down with those documents and go through and ask questions. We don't have time out here to sit down and go through these regulations, as I say, piece by piece. But then after we get into them, when we have to implement them, then we say, "Good Lord, how did they ever think of this?" And then there's no room for adjustment or no room for using judgment. If you want a variance, then you have to go back and get a variance, and takes time. But again, there's no such thing as a clean-cut set of regulations that's going to satisfy everybody's whim and, you know, every question you have and all that.

M.O'R.: Well, in the case of these recent USA administrative rules that you saw, were there problems associated with them that you can see now?

A.K.: You know, I haven't really - we just got them here about a week or so ago, and I really haven't had time to use them.

Deanna could probably tell you if she's had problems with them. But they are more constraining than anything we've had before, and here we are coming up on this plateau again where we're going to have deal with these for another three or four years until we really get used to them and then they'll shoot up again and do something else.

This right here, this is the land development code if you haven't seen it, Community Development Code for Washington County.

M.O'R.: You've got a document that's about three or four inches thick?

A.K.: Well, and this is printed both sides of the page, single-spaced. Now, who in the hell is going to memorize that? I mean, I've taken a shot at it, but I'm not getting very far. So anyway, but that's our Bible in Washington County. Clackamas County has one, it's up there.

M.O'R.: Is it the Washington County Comprehensive Plan?

A.K.: That's not the comp plan, no. This is just the development code.

M.O'R.: The Community Development Code.

A.K.: That's all it is, the comp plan is off in a different volume. I don't even have a copy of that.

M.O'R.: This is Volume IV.

A.K.: No, this is part of the comp plan. This is the Community Development Code. These are administrative rules that we have to deal with, and they're very comprehensive. Every land use district - land extensive industrial district - well, those are areas right in close to cities.

I read this stuff, Deanna reads it, we study it, but I swear, most of it comes through by just assimilation, you know. Use it

for a while, try it, get some feedback from the County, send in a set of plans, they send them back marked up and and try again.

M.O'R.: Eventually you grasp the parts of the code that impact what you're doing and you know what they are.

A.K.: Deanna has. She's smart. She's a graduate of Santa Clara University, and she graduated *magna cum laude* down there. She's a very bright girl, and she grasps this stuff. She has a young mind. She's environmentally oriented. If we didn't recycle our paper in here, she wouldn't even work here, I don't think. We recycle like you wouldn't believe, and ...

M.O'R.: What's Deanna's last name?

A.K.: Hoppe, H-o-p-p-e. And she's getting married in, on the 14th of September. She's marrying Jason Stockman. He's a boy from Hillsboro, and he's an accountant. Yeah, she's good. She is a sharp young lady.

M.O'R.: She's one of your engineers here on staff?

A.K.: Yeah. She graduated in civil engineering. She'll be coming up for her license here in - I guess April, she'll take her exam, and she will not have a problem in the world. She'll sail through that like gangbusters.

M.O'R.: It's good to have good people you can rely on.

A.K.: Well, it's, you know, I've had engineers come and go, and we've always tried to stay small. We just don't ever want to get very big. And I've always hired on the basis of grades primarily. I know grades are only essentially an indication of how well the individual applied himself in college, but still they're a pretty good indication of how bright the individual is, too, and I know in engineering you don't slip through. If you have good grades, you've earned them. But again, I don't know much about Santa Clara University. So before I hired Deanna, I got a transcript of her grades and found out a little bit about Santa Clara.

It is an accredited civil engineering school, and it's very good, but it's a small enrollment down there in civil engineering.

[interruption]

M.O'R.: Well actually, that might be an interesting note to put on the tape. So you say steamboats came up all the way into Forest Grove?

A.K.: That's exactly right, and the railroad also came - as I understand it, there were two trains that came through, the green cars and the red cars, and it was a commuter train that took people into Portland. You probably knew about that, too.

M.O'R.: No, I actually didn't.

A.K.: Didn't you? And then there was a trolley car that came up Elm Street here. Anyway, the trolley took you up to Forest Grove, right up to the central business district, and there's some photographs of the old trolley car up on 21st Avenue and whatever, and it just shuttled back and forth between the train depot down here and downtown.

M.O'R.: Then you could hop off the trolley and get on a train and go to Portland if you wanted to?

A.K.: Yeah. So they think this Max is something new. Well, it's not.

M.O'R.: Well, we've probably just about milked this subject.

A.K.: Yeah, I think so.

M.O'R.: But I'm just wondering if there's any topic that we did talk about that you would like to return to and say anything more about.

A.K.: Not that I think of.

Excepting that I do feel very strongly that the only way - you know, if there's ever going to be a water crisis, and I guess maybe we're starting into one, we are going to have to think seriously about storage of water and look seriously at impoundments.

A friend of mine, Ron McCreary, was a civil engineer, had a practice in Portland. He took the time once to sit down with USGS quadrangle maps of Washington County, of the Tualatin Basin, and he came by my office one day with it, and he had identified about 200 dam and reservoir sites just on those maps. And he said, "You know, it's something we ought to be thinking about." Ron passed away here a few years ago, and so I guess a lot of that material has gone by the wayside.

And I think I mentioned the Soil Conservation Service through this program, whatever it was, they came up with some sites that were pretty good. Corps of Engineers came up with those flood control sites. So there are storage sites. I hate to see them use the agricultural land. They should get back up in the hills where they're not going to affect migratory fish or anything like that, and it would be a good thing. But yeah, it'll happen, takes time.

M.O'R.: Well, I want to thank you very much for taking the time to do this interview.

A.K.: It's been fun.

M.O'R.: Thank you very much.

A.K.: You're certainly welcome.

[end of tape]