

ANDY KLEIN

August 26, 1996

TAPE 1, Side 1

M.O'R.: This is Michael O'Rourke with the Washington County Historical Society, and the date today is August 26th, and we're beginning an interview with Andrew Klein. Today's interview is taking place in his office in Forest Grove.

Let me just ask you first of all where you were born and when.

A.K.: Okay.

M.O'R.: If you don't mind my asking that.

A.K.: No. I was born in Wheeler, Oregon, September 11, 1923. So I'm an old-timer.

M.O'R.: And, let's see, Wheeler's down at the coast?

A.K.: It is, right.

M.O'R.: How long did you live down there?

A.K.: Till I went to college. I was 18 years old and went to Oregon State - in 1941 I started. The war broke out in '41 so it wasn't very long thereafter I joined the Navy and spent actually till 1946 in the Navy. Went back to Oregon State then in 1946.

M.O'R.: Let me just back you up a little bit. What did your folks do for a living?

A.K.: My dad was in the commercial fish business in Wheeler. He had probably as many as 25 to 35 fishermen that fished for him and had gillnet boats, and he owned the boats and the fishermen rented the boats from him and the nets, and that's what he did.

M.O'R.: And growing up in Wheeler, did you participate at all in helping your dad out?

A.K.: Oh absolutely, yeah. I helped him pack fish - clean fish, pack them, paint boats, do all the work that I could around there, yeah.

M.O'R.: And your mother, did she ...?

A.K.: She kept the books and was a housewife basically, but she kept the books primarily.

M.O'R.: What were your parents' names?

A.K.: Hugo and Bell Klein.

M.O'R.: And you grew up in Wheeler, then, before going to college. Did you ever get away from Wheeler, or was that entire period spent in one place?

A.K.: No, if we ever got away from Wheeler, it would have been a very very short trip. Probably the longest trip I ever took up until the war broke out was Seattle, something like that. That was it. Yeah, I didn't get to see much of the world.

M.O'R.: So then you said that you went to Oregon State very briefly before you entered the service?

A.K.: Right.

M.O'R.: Well actually, first of all, let me just ask you a little bit about your school experience down at the coast. What sort of grade school did you attend?

A.K.: Grade school and high school were all in the same building, grades 1 through 12. The high school - I'm kind of guessing, but maybe 50 students totally in the four grades. It was very small, and that was about it.

The courses that they gave were all pretty general. Going into engineering at Oregon State, I really didn't even have the background, educational program I needed to go to Oregon State, and I learned that after about one term. Then I decided maybe I'd better do something different, so I took some different courses to get beefed up, and then it worked out a lot better.

M.O'R.: And that was what you ultimately got at Oregon State was an engineering degree?

A.K.: Yeah, I have a bachelor's and a master's in civil engineering.

M.O'R.: When you were growing up in Wheeler and going to school, were you already on a somewhat technical bent by that time? What were your favorite subjects in school?

A.K.: No, I was pretty interested in just about everything. No. I liked math. Perhaps if I'd taken language, something like that, why, I might have gone a different direction; I don't know.

But I'd pretty well made up my mind by the time I left Wheeler that I wanted to be in engineering of some sort. I think that came primarily, though, not as a result of school, but more as a result of - I was in Boy Scouts, and I really enjoyed doing things like mapping and projects of that type, merit badges, you know, it was - I liked that, and that probably was more conducive to my getting in engineering than high school.

M.O'R.: You decided not to follow in your father's footsteps in the fish business?

A.K.: Well, it was pretty obvious after the Tillamook Burn that there were not going to be any more fish in the Nehalem River, that there were too many competing interests, the deepsea - the trollers, offshore trollers, the Japanese were out there getting the salmon. The spawning beds on the Nehalem River had all been pretty well silted in by the fire, and so on and so forth.

So the fishing was pretty much on the decline at the time that I was 18 and went to college, and so my dad, at that time started getting out of the fish business, and he built an apartment complex in Wheeler to accommodate the people that were coming in, the arthritics that were coming in to the Reinhardt Clinic for treatment, and so his fish business, oh, I'd say by the time the war started, somewhere along in there, was pretty much out and then - by reason of no fish and then - the Tillamook Burn was in 1933, and then by the time the war had started - well, I can't remember, but it was sometime along in there, maybe after the war, maybe shortly

before the war, that people in Oregon voted the coastal streams out of commercial fishing anyway, so it was all over. That was the end of it.

M.O'R.: I see. This was that measure to sort of protect the streams from over-fishing or something?

A.K.: Well, the sports fishermen were probably more interested in their own interests, and basically I think that's what happened. But they didn't have any fish to fish either. And even today - I can remember the Nehalem River back in the '30s - good lord, the early '30s especially, say, when I maybe 10, 11, 12 years old - you could almost walk across the Nehalem River on the backs of fish there at Wheeler. Oh, it was just unreal, the number of salmon. All gone.

M.O'R.: So did you fish as a kid for recreation?

A.K.: Oh absolutely, yeah. Oh, I just loved to fish: fly-fish, troll for salmon, whatever, yeah.

M.O'R.: That must have been great to fish on such a productive river, then.

A.K.: Oh my, you wouldn't believe it, but we could go - I had one or two, I had actually three boats over time, and I could go down to, sailboats and rowboats. I never did have a motor boat, but if I wanted crab, you could go down to the lower bay and catch all the crab you want, or flounders or all the clams. It was just absolutely unbelievable.

M.O'R.: And apart from Boy Scouts and fishing, were there any other favorite recreational activities you had in those days?

A.K.: No, I'd say probably that was about it. I think the Boy Scout program - you know, we had a Boy Scout troop down there that was really something, but I look at the photograph of those lads that were in that and, you know, every one of those guys - one fellow just retired here recently, and he sold his business for 35

million bucks, and a couple doctors came out of that. One fellow was the chief geologist for the Arizona State Highway Department. Another fellow was a very prominent engineer for the United States Geological Survey, and he was killed in Alaska in a plane crash. I don't think there was a single guy in that group that didn't do extremely well. Amazing, yeah.

M.O'R.: And let's see, Camp Meriweather, I guess, was ...

A.K.: That's where we went. Mm-hmm.

M.O'R.: Yeah, it was right in your neck of the woods. I assumed you probably went there.

A.K.: That's right, yeah, we went down there. I went either two or three years, and my son went down, too.

M.O'R.: Well, I was in Scouts, a bit later than you, and I went to Camp Meriweather.

A.K.: Oh, that's -. Yeah, and I have lunch every day up here with a fellow by the name of Bob Nixon, who's a dentist, and he was an Eagle Scout, and he went to Camp Meriweather.

M.O'R.: Probably back in those days, it was still a bit of a walk in to the camp?

A.K.: It was a walk in, right.

M.O'R.: Yes, I remember that from even later.

A.K.: Great place.

M.O'R.: Well, so you decided to go into engineering, and then you went to Oregon State, and you said that you were playing catchup there in the first term or so?

A.K.: Yes. I didn't have a good background for math, and chemistry I knew absolutely nothing by the time I got to college, and then I had to take a year of chemistry and I had a real tough time with that. So I thought, no, I'd better drop back and get my math, and I'd taken a correspondence course in math before I went to Oregon State; that still wasn't adequate.

Then of course the war came along and I stayed at Oregon State into 1942, and then I went into the Navy V-12 program and I went up to Pocatello, Idaho, to Idaho State, and that gave me an opportunity then to really get into math and other subjects. And by the time I went back to Oregon State after the war, I had gone to midshipmen's school, I'd had a commission in the Navy, went back to Oregon State, and I was well qualified then to go ahead and just finish it.

M.O'R.: And Pocatello, there was a Navy school there?

A.K.: No, it's Idaho State University, ISU.

M.O'R.: Okay. But you were sent there by the Navy?

A.K.: Yes. Spent two semesters there, and then went to midshipmen's school in Plattsford, New York. Spent about - they said call us 90-day wonders, but I was there a lot longer than 90 days. And then I went from there out to the fleet.

M.O'R.: Which fleet? Where did you spend your active duty then?

A.K.: In the South Pacific.

M.O'R.: In the South Pacific. Was the war still going on at that point?

A.K.: Oh absolutely, yeah. I was in on several invasions. I was what they call a boat officer, and I'd lead a wave of boats into the beach on these invasions.

M.O'R.: So what were some of the invasions that you were in on?

A.K.: Oh, Iwo Jima and Okinawa.

M.O'R.: So you must have seen some real horrors of combat then during the period?

A.K.: Yeah, it was interesting. Actually, I don't know if it's any interest to you or not as an Oregon Historical Society person, but it was kind of interesting. My boat group commander

was a fellow named Howard Whalen, who was a football coach at Loyola University and I think maybe at St. Mary's at one time, in California.

He had to come back to his mother's funeral, and Kodachrome film had just come out at that time. So he picked up several rolls of it and took it back, and he had a camera. So on the invasion there at Iwo Jima, he sat on the bow of the first boat that went into the beach, taking pictures left and right. These are the first color photographs that were ever taken of any military action. Even the Marine Corps didn't have Kodachrome.

And so he sent one roll of slides out to be developed, and then of course, the development company had to report him because we were not supposed to have cameras, and he almost got a court martial because of it. And I always wanted to get copies of these photographs, and I could never locate Howard Whalen. I knew he was from L.A., but every time I'd go to Los Angeles after the war - and I made many trips - and I'd look at the phone book and I never could -. He was in Bakersfield, and he was up here two or three times looking for me, and he couldn't find me.

Well, anyway, he passed away and his wife found these photographs in a shoebox, and so she sent one of them to *National Geographic* and they printed it, and I was going through this National Geographic and I saw that - or I was down here at the gun shop getting a key made, and the guy was telling me about this, and I said, "I know exactly what happened. That photograph is Howard Whalen's photo." Matter of fact, it happened to be the 50th anniversary of the invasion of Iwo Jima when I was down there, and so he mentioned - I don't know how the subject came up. But I went home and looked at my *National Geographic*. and I knew it was Howard's photograph. Sure enough, it was, and now I could get in touch with him.

So I wrote *National Geographic*, and the lady that I communicated with there said, "I can't give you Mrs. Whalen's address." Howard Whalen had passed away. But she said, "If you'll write Mrs. Whalen a letter, I'll forward it on." So she did. Mrs. Whalen drove up from Bakersfield, brought the photographs, and now I have a copy.

M.O'R.: That's great.

A.K.: The only - the first colored photographs, and it gives a very vivid description of the invasion and what's happening slide by slide, you know, as he's going into the beach, and then after the invasion is well under way, and the battleships and all of that is quite something to see.

M.O'R.: Did you come under fire yourself?

A.K.: Me? Well, I led the fourth wave in, which is the first wave of boats, right after the seagoing tanks land. Yes, I was standing like from you to me from Japanese. It was a very unpleasant experience, yeah.

M.O'R.: I'll bet. But you survived.

A.K.: Yeah. Didn't even get wounded.

M.O'R.: When you were in Pocatello, I understand that there was at that time some ordinance manufactured there for the war?

A.K.: There was a naval gun plant out of Pocatello just a little bit where they took the battleships and cruisers, big guns, the 16-inch and the 12-inch guns, and they drop them down in a pit. They heat them, they cool the liner, they heat the jacket, and they can pull the liner out of the jacket. Every time after these 16-inch guns are fired X number of rounds, they have to come back, and the ships could pull into Guam or any of the naval bases in the Pacific, Pearl, and replace the guns, and then the guns came to Pocatello to be relined and then back out to sea again.

I don't know how many rounds they fired, but I know there at Iwo Jima - see, when you go in on one of these landings, the ships - the ship that I was on was the Sandborn, and it would be in the area during the day unloading supplies and all of that. I couldn't get back to the ship, so I sat out there in a boat for almost 10 days before I got back to the ship. And during that time at night, rather than sit out, too far out, I'd sit between the - my boat crew and me, we'd sit between the battleship and the beach, and then all night long they were firing over our heads, which is kind of interesting. You see those tracers go. It was really great. And that gave us an opportunity to get some rest without worrying about submarines or some other dumb thing out there.

But those battleships must fire - they were firing broadsides all night, I don't know, every night, and star shells and what have you. They illuminate the island all night long so it's just like daylight on the island for the Marines. The Marines don't take a break for dinner or lunch or anything else. They just go to work.

M.O'R.: So you were on a boat in between ...?

A.K.: Yeah. Then in the morning, bright and early, just as it gets daylight, why, we were off and running again. Then I would get all my boats together again, and we had supplies to get in and casualties to get out. There was a hospital ship laying out there, and we worked back and forth between that.

I spent some time on the beach the first day. I didn't intend to, but the boat I was on got shot up and sunk, so I was spending a little time there. I didn't want to, but that's the way the cookie crumbles.

M.O'R.: Waiting for another boat, huh?

A.K.: Yeah.

M.O'R.: Well, so then after the war, you came back to ...

A.K.: I went right back to Oregon State.

M.O'R.: And finished up your degree in civil engineering?

A.K.: Right.

M.O'R.: And then what did you do after Oregon State?

A.K.: Then I came right directly to Forest Grove as City Dngineer, and I was City Engineer here for 12 years. Then I went to work for the Cast Iron Pipe Research Association in Chicago for four years. Then I was back - well, I didn't move to Chicago; I lived here, but I was the regional engineer for Oregon, Washington, Idaho, Montana, part of Utah, and Northern California, including San Francisco, and Alaska. So I did a lot of traveling at that time.

Then I wasn't making as much forward mobility as I felt I should in the civil engineering profession, so then I went into the consulting business at that time, and I felt I had a pretty good background, and it worked out all right.

M.O'R.: So you started this business that you still operate today here in Forest Grove?

A.K.: Well, no, I thought I'd better get with a couple other consulting firms and really learn the consulting business then, which I did.

M.O'R.: What was the first consulting firm you joined?

A.K.: Actually, Bob Meyer and Carl Green and I went together. And Bob Meyer - he just sold his firm. But the three of us were together for a very short time, and that kind of went kaput.

M.O'R.: That was here in Forest Grove?

A.K.: No, in Beaverton.

And then right after that, I got into my own business, and it's worked out just fine. Been very busy, and actually my first job was I had a contract with DEQ for two years doing a water quality management plan for the state of Oregon, and that gave me

a pretty good insight into what's happening to water resources in Oregon from a water quality point of view.

M.O'R.: Well, I want to talk to you about that a little more, but first of all, let me just ask you: You got the job as Forest Grove City Engineer as a result of applying for it right out of college?

A.K.: Well, actually, when I was getting my master's degree, I was doing research on industrial waste treatment, on the type of - it was actually on pressboard, what we call pressboard wood waste liquor. It's this hard board that they make, and there's a liquor that comes off of that that has a high BOD, a high biochemical oxygen demand, and if you get it into a stream, it's just deadly. It depletes the oxygen, and the fish will die, any other aquatic life will die. So I had a fellowship, a grant from the state - actually at that time it was the state Sanitary Authority, which embraced both what is now DEQ and the state Health Division, and I was able to get a grant from them to conduct this research.

Well, Holly Cornell of Cornell Howell Hayes & Maryfield - Fred Maryfield was my major prof - they approached me on coming up here to spend a couple years to do some research on land disposal of domestic sewage. And so that I did, and then at the end of - oh, it didn't even last that long, maybe a year or year and a half, the City needed a City Engineer, so I was just appointed as City Engineer and Director of Public Works.

M.O'R.: And that was just because by that time you knew people in the community and they knew who you were?

A.K.: Yeah, I was here and working for the city, and so they - as I say, they needed a City Engineer. So they didn't even bother taking applications; they just said, "You've got the job," and that was nice.

It was a good job. It was very interesting. Lots of work. It was more administrative than engineering and more dollar-oriented, finance, a lot of work on municipal finances.

M.O'R.: You took care of finances in terms of the engineering side of it, was that it?

A.K.: Well, bond issues, local improvement districts, that kind of thing.

M.O'R.: For construction of projects and that kind of thing?

A.K.: Right, mm-hmm.

M.O'R.: And by that time I assume you lived here in the area, too; is that right?

A.K.: Yeah, we lived here.

M.O'R.: In Forest Grove itself?

A.K.: Right. Right where we live today, as a matter of fact.

M.O'R.: Actually, I guess I should ask you, is it "we"? You're married, I assume?

A.K.: I'm married, yes. My wife's the famous person in the family. She was a school board member here for a number of years. Then she became the president of the Oregon State School Boards Association, and then she became a director on the National School Boards Association. And so if you want to know something about school boards in Oregon, why, she knows it.

Matter of fact, she's going down to Las Vegas here probably in about another month to meet - she and three other gals that were also all presidents, past presidents of the Oregon School Boards Association to meet with Tom Rigby, who's now retired and was the executive director at that time, and so they're going to have a little reunion in Las Vegas. That's great.

M.O'R.: Sounds good.

A.K.: Yeah, sounds like fun.

M.O'R.: What's your wife's name?

A.K.: Barbara.

M.O'R.: And you met her here in Forest Grove?

A.K.: No, met her at a dance in Rockaway of all things, right after the war in 1946. Right after I got home. She's from Tillamook.

M.O'R.: You began a courtship then at that time?

A.K.: That's right.

M.O'R.: When did you marry, then?

A.K.: We were married in '47 and had son number one in 1950 right after we came to Forest Grove, and so we have three children, a boy, a girl and a boy.

M.O'R.: What are your children's names?

A.K.: Greg, Susan and Steve.

M.O'R.: And your wife's family, were they from the coast?

A.K.: Tillamook, yes.

M.O'R.: When did you first begin to have an awareness of the Tualatin?

A.K.: I would say probably day one when I came to Forest Grove because Forest Grove was discharging sewage into the Tualatin River without treatment, and it's right down on Fernhill Road, they were creating an incredibly bad problem, a big pile of sludge in the river. Fish couldn't get past it; they were dying. It was pretty ugly.

And so a fellow by the name of Warren Westgarth came up. He was later a professor at Oregon State. He'd gone to North Carolina where he got his doctorate, but at that time he was - he and I were working on this research thing, and our object was to see if land disposal of sewage effluent would keep the water out of the Tualatin River to give the fish a surviving chance. And I think we succeeded in what we came up here to do.

It indicated that Forest Grove desperately needed a primary plant. The old primary plant that they had was built in - and I'll explain what a primary plant is - but it was built in 1915 and designed by an engineering firm called Stevens and Koon, and that was the forerunner of Stevens, Thompson and Runyon, and they're now no longer in existence. And J.C. Stevens was perhaps one of the - a very famous civil engineer. He had done an awful lot of work, prolific writer, and his designs were just excellent, and they did the design here in Forest Grove for the sewage system and the treatment plant.

But by the time I got here in 1950, the treatment plant was totally outmoded. They had added a couple of canneries in town that were then discharging industrial waste. There was no way that the treatment facility could cope.

M.O'R.: The canneries, then, the industrial waste from the canning operations, was that just mixed in with the other residential ...

A.K.: Yeah, it was all mixed together, right.

[end of side one]

ANDY KLEIN

August 26, 1996

TAPE 1, Side 2

M.O'R.: So that's what you were looking at ...

A.K.: That was our job, and to at least to do the research and find out what we were dealing with, and at that time it was Cornell Holland Hayes and Maryfield, and now it's CH₂M Hill, and they had just started in Corvallis, and they'd been in business, oh, just a couple years, and Fred Maryfield was teaching at Oregon State. He was the major prof, and Warren and I both went to school under Fred, and so as I say, that was our job to see what we could do to dispose of the sewage on land.

It culminated in the design of a primary plant which - a primary plant is where you just remove the solids from the effluent, and then we were discharging the effluent onto the 50-acre farm we had here, and trying and avoid any water getting into the river if we could. And then that didn't work especially well, so we built a big, what they call an oxidation pond, which nowadays they call lagoons, and that wasn't working all that swiftly either because we were having odor problems from that, which the LCity got sued.

M.O'R.: By some local property owners that were near it?

A.K.: Yeah, a fellow by the name of Birdsell that lived right next door, and I don't blame him. It was pretty bad.

Then we built a new primary plant to settle the solids and clean the sewage up the best we could, and that didn't work all that well either, and then they went to a secondary operation which is a trickling filter, and the primary plant would take the solids out, the secondary plant takes the dissolved solids out, and it's

kind of a very quick and rough way of explaining it, but that's what happens.

Now Forest Grove has a regional plant. Unified Sewage Agency owns and operates it, and it's a regional plant for - well actually, Banks and Gaston pump their sewage over here, and Forest Grove sewage, and then there's a line between here and the Rock Creek plant over at Hillsboro, so that they can bring sewage back and forth as needed. It's a very complicated system now, and I think it's quite effective insofar as cleaning up the Tualatin.

The Tualatin - and I didn't really recognize this until I got into these water quality studies with DEQ back in the '72 to '74 - the Tualatin River at that time was incredibly bad with all the population we had out here. It's a slow-moving stream. It's not a vibrant stream at all like you might find coming out of the western slope of the Cascades. Very slow, very sluggish, very warm water, and of course, with warm water and nutrients and sunlight, it's a setup for algae, and that's exactly what you have, and that's a part of the pollution. Of course, warm water in itself is pollution, and then if you're high in nutrients, nitrogen and phosphorus, things of that type, then you also have problems again with the algae, whatever.

So there have been a lot of problems on the Tualatin as far as - and awfully hard to identify, and there's been a lot of people spent a lot of time trying to make identifications, trying to quantify what's there.

M.O'R.: You said that original sewage plant, the one that was designed way back when, you said that there wasn't even a primary treatment at one point?

A.K.: That was a primary treatment plan. It was an old, what they call an Imhof tank, and it was designed by a fellow - well actually, the one that we had here was designed by Stevens and

Koon, but it was a, I don't know if it was a patented thing or not, but a fellow by the name of Carl Imhof in Germany invented this thing, and it was a settling tank, and for a town of a couple thousand people without any industry, it probably worked just fine. The water would come into it, the sewage would come in, it settles out, and they have these deep basins, and the sludge would go to the bottom, and it acted as a digester for the sludge, and it gave off incredibly bad odors, but it worked to a degree way back when.

But then when you put the canneries on it and especially with the corn waste that was coming out of the Hudson house cannery over here north of town, it couldn't cope, it couldn't keep up, and the city council, quite frankly, they were frantic. They needed to do something, and I would say that Cornell Holland Hayes and Maryfield did a damn good job getting this thing going.

M.O'R.: So in effect, it overloaded Imhof's settling tank, you didn't have any primary treatment, or at least not ...

A.K.: Not really, it was just a pass-through thing, and the sludge was - when Warren and I got up here in May or June, along in there, of 1950, to do this thing, to work on the treatment plant, it was foaming and you had an incredible sludge had come up on the surface of these tanks. I wish I'd taken a picture of it, quite frankly, and the sludge was going on down to a outfall pipeline down to the river, being dumped in the river. It was settling out there, hydrogen sulfite gas was bubbling up. You can't believe how bad it was. It was ugly.

M.O'R.: And of course there was a downstream impact, too.

A.K.: Terrible, it was really terrible, and then Stimson Lumber Company, they have a plant up there called Forest Fiber Products, and they made this pressboard liquor, hardboard liquor, and they were discharging that into the river directly, and so along Scoggins Creek, they were killing everything in that stream

which is tributary to the Tualatin which is turn tributary to the Willamette. So the Tualatin River was pretty ugly at that time, pretty bad.

M.O'R.: And it got even worse, right, between 1950 and 1970?

A.K.: Well, no, by the time all of the municipalities - Cornelius, Gaston, Forest Grove, everything up this way and Hillsboro - they were all required to put in sewage treatment facilities, and it was helping a little bit.

M.O'R.: On an individual basis?

A.K.: On an individual basis, yeah. That's all changed now.

M.O'R.: Right, well, was it '70 or '71, there was a moratorium out here on construction.

A.K.: There was here in the valley, and that would be about right, yeah, along in there someplace. There was a moratorium, and DEQ said, "No more construction, not till you guys get this thing squared around."

Then that's when the Unified - I don't know the exact date that the Unified Sewage Agency was formed, and Dan Potter who was City Manager here in Forest Grove, and he came on just as I left. He came on in '61. I left in '62 to go with the Cast Iron Pipe people, and then Dan became the first General Manager of the Unified Sewage Agency, and I'm not sure what year that was, but I suppose it was probably about that time, '71 or '70, somewhere in there. I'm not sure.

M.O'R.: I guess at that time Gary Krahmer, who was his successor, was running the Aloha Sanitary District?

A.K.: That's correct, yeah. Gary's a good man. I was on what they called the Unified Sewage Agency Advisory Commission for pretty close to four years when Gary was the General <anager, and we were advisory to the County Board of Commissioners, and there were a lot of good things that passed through us at that time that

they went on to the Board of Commissioners and which they adopted, and which I probably would have a tough time remembering if you were to ask me just what specifically were they.

But we were also, as an advisory commission - there were five of us - we were also, we and the County Board of Commissioners formed what was the Budget Committee for the Unified Sewage Agency, and we met at some length once every year to adopt a budget for the Unified Sewage Agency. And that was a good thing because it gave us a better insight as to what the money problems were, and Gary had a fellow by the name of John Crossage, who is now the county administrator for Yamhill County, who is absolutely, I think, one of the finest finance officers I've ever met in my life. He was good, and he brought reports back to us that were just absolutely excellent, and I felt that with that information in hand, we could make just excellent decisions for budget, and then for the projects that were coming on the next year, and that's what it takes.

If you're going to clean the Tualatin River up, it's going to take money and you need people who are responsive, who are good administrators and who have the guts to go ahead, who have the vision and the guts to go ahead and implement these programs. And Bonnie Hays at that time was on the Board of Commissioners, and John Meek was on. And these were, I might add, very fine people, very good. And Eva Kilpack, I think she was on. I don't remember who all was on at that time. There was a fellow - can't remember his name now. I worked on his campaign, too. Wes Milenbeck who became chairman of the Board of Commissioners who was a very good man also. As a matter of fact, Gene Seibel and I sat with Wes before he was elected and spent, I would guess, about four or five hours with him explaining the problems on the Tualatin River and what needed to be done, and he used a lot of that material in his

campaign which I think helped him. Politicians are very important in the whole process.

M.O'R.: This would have been about - his campaign was in what year?

A.K.: I don't remember what year Wes was in there.

M.O'R.: But it was in the 70's sometime?

A.K.: It probably was in the 70's, yeah. I was going to say, though, that a lot of the things originate with staff, and I feel many times that we are - the staff has too much influence and all. But the Board of Commissioners are very, very important in the whole process, and I always felt very comfortable with Wes, and I've always felt very comfortable with - I just gave you her name a minute ago, who was also chairman of the Board ...

M.O'R.: Bonnie Hays.

A.K.: Bonnie Hays, yeah, and she was very good. And the thing I liked about Bonnie, if I felt very strongly about any kind of an issue, I could call Bonnie and say, "Bonnie, time to have lunch today. We need to talk about something."

"Well, what do you want to talk about?"

"This is it."

"Great." So I'd buy her lunch and we'd talk, and that's of course very sad she has this cancer thing now. I don't know how she's doing, but she's a neat person, she's really great. Very good administrator. She's kind of a little on the - what I would say, a little on the flip side, but so be it, that's her style and it works. I'm totally out of touch now with the County Commission since Bonnie left and since John Meek left.

M.O'R.: Let me bring you back a little bit to the early days of your interaction with the Tualatin. You mentioned the problem you had here with the sewage and also the effluent from the sawmill or lumber operation.

A.K.: Yeah, Stimson Lumber.

M.O'R.: Right. What other kinds of impacts were there in those days - I mean, big or small? I imagine that all of the farmers probably didn't have too much consciousness about what they dumped in in those days?

A.K.: I'm sure they probably didn't. We were not in touch with that too much. But the depletion of flow in the Tualatin River - that's what Ted and I and you were talking about when you came in - quite seriously, you'd hear these dynamite blasts go off, and it was a long time before I realized what was really happening. And then I was talking to someone one day and mentioned it, and they said, "Good Lord, those guys are blowing holes in the bottom of the Tualatin River so they can get their section lines down deeper for irrigation. The water just isn't there."

M.O'R.: And there wasn't really any management in those days of the amount of water people took out of the river, either, was there?

A.K.: Not at all. It was pretty much, I guess you could say, wild west. I'm sure they had water rights, everybody had a water right, and some of these water rights are very good, you know; they go back to 1909 when the water right law was first initiated in Oregon, or 1906, whenever it was. It was somewhere in that period.

Of course, Oregon is on a situation where if you are number one water right, you're number one, and you get your water, and the next guy that filed after you, then he's number two, and if you happened to have been in Lake Oswego that had the prior right on the downstream end for 50 some odd second/feet, everybody up here was going to let the water go until that right was satisfied. Even though it was a nonconsumptive right, it didn't make any difference. It was for power generation there at Lake Oswego. And

that's probably the main thing that brought about the construction of Scoggins Reservoir and the Trask River dam, absolutely.

M.O'R.: You just said, though, that people didn't pay much attention to water rights. They would just go ahead and blow the holes in the bottom.

A.K.: Well, they could blow the holes, but they couldn't do anything that violated the water right.

M.O'R.: Of the Lake Oswego folks?

A.K.: Well, okay, let me explain a little bit. The water rights, there might have been a guy up here - well no, they were taking more water than they should to let Lake Oswego have their - I think it was 54 cubic feet per second that had been applied for down there, and actually they were taking that water before the water right law came into effect, and so it was either by a court decree or something of that kind that gave them the granddaddy water right on the Tualatin River.

So yes, these people were probably taking water up here that they shouldn't have been taking, and it wasn't until Lake Oswego finally blew the whistle on that dam that forms Lake Oswego and that little power generator in there - it wasn't until that happened when they blew the whistle, and they said, "Hey look, you guys are taking water that is really first ours."

That's when Jim Barney, who was City Manager in Hillsboro, came to Forest Grove, met with Mel Gardner, who was City ~~anager~~ here at the time, and then they called me, and we brought some other people in, and said, "Hey look, we've got a problem. They're getting a little ticked off down there at Lake Oswego. We're going to have to do something." And so that's when we had the Bureau of Reclamation come in, and they did studies on three or four dam sites, and they finally settled on the Scoggins.

And then I reviewed those studies, that study, and recommended to the City of Forest Grove that they buy 2,000 acre-feet of water. "Don't dilly-dally, just go ahead and I don't care whether you can afford it or not, you can't afford not to do it." And Hillsboro did the same, and I think perhaps that Tigard did the same, and there were a number of municipal purchases of stored water at Scoggins, which is very good thing.

And I might add that - I don't know if you've ever seen that study or not - it doesn't amount to a hill of beans, and it was all predicated on a cost benefit basis, and I was impressed with the Bureau of Reclamation, how they worked it out so that the benefits exceeded the cost.

And you know, it's been the greatest boon for the Tualatin Valley because the irrigation system extends all the way from, oh, around up to Gaston and clear down the valley beyond Hillsboro. And now you're getting high production type crops. There used to be a lot of dry-land farming and whatever, strawberry crops or things like that they could raise with the irrigation out of the Tualatin and its tributaries, but now they have these turnouts all over the valley and boy, things are - you know, agriculturally speaking are booming.

And I can remember, too, a lot of farmers coming in and talking to me about it when I was City Engineer - you know, "Should I do this?" And we'd been going through quite an exercise trying to figure out where there would be a place for storage, and I was looking at the Devil's Lake fork of the Wilson River to store water up there. We had a great dam site, and pump the water over the ridge into our watershed, and if I could get storage - you know, in those days if it came out five, six, seven hundred thousand dollars an acre-foot, I was in tall clover. I thought this was beautiful.

Then the Bureau comes along, and I don't remember what their number was, but it was probably less than \$200 an acre-foot. Good Lord, build it, don't even hesitate, and then I'd tell these farmers, "You can't - first of all, you don't have water. You need water. Don't hesitate, just go ahead and buy some of this. If you have to mortgage the house and the kids, do it, but get the water." And they - oh boy, they're just wringing their hands, you know, "Good Lord, I'll go broke," and I said, "No way. You never had it so good. Do it."

And of course, they weren't in on these studies that I was doing because I was looking at costs and what it would cost the city of Forest Grove, and we just didn't have water. The prior water rights exempted Gales Creek, and municipalities don't have any right ahead of anybody else. The only advantage a municipality has on a water right is the City of Forest Grove could file and keep a water - they could have filed back in 1906 for all of the water on the Tualatin River and could have kept it intact if the Department of Water Resources would allow it. They probably wouldn't allow that much, but they would have allowed a reasonable amount, and they could have held it until they could use it, as long as they were showing some progress toward using it, toward developing it. And that still exists today. You can still do that. But now, if you applied for a water right in the Tualatin Basin today, you can forget it. They're not allowed any longer, no more.

M.O'R.: Just because there's not enough really any water rights to ...

A.K.: There's nothing there. Yeah, nothing there.

M.O'R.: Now, you mentioned that you had done a study on a storage reservoir on the Wilson River?

A.K.: Yes.

M.O'R.: Was that a different reservoir than the one that's - oh no, it's the Trask.

A.K.: The Trask River. Okay, the story on that is that we were looking before Hillsboro looked, and I came up with this thing on the Devil's Lake fork of the Wilson River. With a small dam, we could impound a couple thousand acre feet and then pump it over the ridge into our own watershed. Then we met with Cy Evers, who was head of the state Sanitary Authority at the time, and he said, "You can, but you're going to have to treat it." Well, then Hillsboro got to looking ...

M.O'R.: Roughly what year was this that you're looking at this?

A.K.: That would have been in the mid-'50s - '54, '55, '56, probably somewhere in there. Then Hillsboro got the idea, and they got to looking at the Trask, and they found a site up there that would be a good dam site. And Hillsboro has a unique administrative setup. They have a Water Commission that administers their water system, not the City Council, and I think it's a three-member commission with the City Manager in Hillsboro acting as the liaison between that Water Commission and the City Council. They can go ahead and do just about anything they want without even going to the people in Hillsboro for a bond issue. Pretty nice. They can move with the speed of light. Forest Grove could not.

And so, as a result, Hillsboro went ahead and they came back to us and they said, "We have this dam site. We can impound" - I think it was 4,000 acre feet, which was now going up to 20,000. "We can impound that kind of water. Would you be interested in buying 500 acre-feet or 12 and a half percent, one eighth of it?" And my recommendation to the City Manager in our council was: "Go for it. Don't hesitate, let's get it." So Forest Grove owns - I think it was 500 acre-feet.

Then they formed a joint water commission with Forest Grove as a member, Hillsboro's a member, and now they have Beaverton in it, and that's the joint water commission that you hear about.

M.O'R.: So Forest Grove, then, since that time, has been getting its water from the same sources as Hillsboro?

A.K.: Forest Grove has three sources, actually. They have Clear Creek, which is their old watershed that is up in the eastern slope of the coast range above the town of Gales Creek, community of Gales Creek. They have Scoggins. I don't know if they still have the 2,000 acre-feet of water there or not, and then - I'm sure they have most of it. They might have sold some to Beaverton when that thing came about. And then they have the Trask, and the Trask River water is now treated. That comes down, and there's a slow sand filter that treats that up above Haynes Falls up above Cherry Grove.

Hillsboro's old primary source was Sane Creek which is up the Scoggins Valley. No, Hillsboro's primary source was the Upper Tualatin. I'm sorry. They did have also a source up Scoggins Creek. And then Forest Grove's principal source is still their watershed up on Clear Creek.

M.O'R.: Maybe you had just taken as City Engineer about the time that the Army Corps came in and you proposed doing some work on the Tualatin to improve the situation. I guess they ...

A.K.: I was city engineer at that time. That was in the early '50s, and I think, Colonel Walsh at that time was - I'm not sure if he was the district engineer or the division engineer, but he was the one who was primarily promoting these flood control dams. There would be one at Gales Creek. I think there was going to be one over on Dairy Creek someplace, maybe one on the Tualatin. I don't know, there were three or four Corps of Engineer flood control things that were being promoted.

That died because of the lower Tualatin people, Roamer's Rest and Johnny Frederick's Avalon Park, they didn't want it because they were afraid it was going to interfere with -. I think it would have helped them because I think that the releases in the summertime would have made it an ideal situation for those people. But they were pretty instrumental in killing it.

M.O'R.: How did they do that? Just by raising a ruckus?

A.K.: Yeah. And General Walsh went to - I think he went to Morocco to build a SAC Air Force base, and that was kind of the end of that.

M.O'R.: Was that the same plan that also called for straightening out the river?

A.K.: Yeah, and that was probably the thing that did more - the channel straightening.

M.O'R.: That was the more controversial part of it?

A.K.: I think so, yeah.

M.O'R.: And they were also, I think, planning to do some treatment of the banks with riprap or something?

A.K.: I don't remember that, but if the Corps does anything, they do it in a grand and glorious way, and probably - yeah, I would guess, maybe riprapping. I don't remember that part of it, but it sounds logical.

M.O'R.: But the main objection that the folks lower down the Tualatin had was that they were afraid it would impair their flow?

A.K.: You know, I'm not really sure. I remember the meeting we had was in the lunchroom in the city of Forest Grove City Hall, and we had - the Corps was there that day and gosh, we had - must have been 40 or 50 people up there, and ...

[end of side 2]