# GEORGE WEYERHAEUSER INTERVIEW August 18, 1992

This is the beginning of an interview with George H. Weyerhaeuser conducted on Tuesday, August 18, 1992. The interview took place at corporate headquarters in Mr. Weyerhaeuser's office at Weyerhaeuser Company. This is Tape I, Side A.

## GHW

Maybe you'll get tired of asking questions.

## Interviewer

I don't think so. In fact, I enjoyed going back over the other interviews. The last interview in that series that we did was in 1985 and, so what we're really covering is the period from 1985 to the present. I thought we might start with the organization redesign that took place, or was really taking place at the time that we last talked. We didn't have at that time, much perspective on it because you were in the middle of making those decisions. When you think back now, how do you recall the decision-making process as it related to forming the Paper Company, the Wood Products Company and that effort to reorient the company in a way, I suspect, that may have been counter-intuitive for you?

## GHW

I don't know. Why do you say "counter-intuitive?" What leads you to think that?

## Interviewer

Well, the years of your career and the approach that your father had taken, which was to reduce the differentiation between the pulp and paper side and the wood products side, and the fact that you had spent a great many of your years working towards integration. I guess that's why I used the term, "counter-intuitive." But that may be completely inaccurate.

## GHW

Well there have been and, were then, conflicting ideas about what are the primary emphases. I guess, looking back, you've always got the problem of decentralization of unit authority and responsibility and always working against efficiency and effectiveness and direction coming from a central overlay. Whether that be headquarters or, as in this case, a series of intermediate organizations which form a life of their own and a culture of their own, etc. I guess thinking back, if I had it to do all over again, which one of these ought to prevail? You think, "We've tried them all."

We went through periods of attempts to strengthen the geographic management. Trying, in effect, to put the emphasis on areas...geographic areas. So I think when you say "counter-intuitive," what sticks out in my mind is the Paper Company and the result of forming the Paper Company and a lot of team building and fence building. Maybe that's the most dramatic thing that happened as a result of that, which then and now I have misgivings about. I know what we were trying to do and I know what the people that were involved wanted to do. They wanted clarity of purpose and direction within that segment and, of course, that comes about at the expense of all else in the sense that they isolate themselves and you have all the problems of

duplicative functions if you're not careful-which is overhead and expense-can be. That's a natural consequence, I think, of giving somebody an assignment and saying, "This is your baby now. You take care of all aspects of it." All aspects mean that you can empire-build within those walls and not use corporate support services and not cooperate within the geographic regions. So to some degree, all of those things happened.

Now are the benefits associated with having a team focused sufficient to offset that? That's always going to be the problem. You know, if I look back on it from this moment, I'm inclined to say that the benefits of concentration and direction in that subsequent period did outweigh what I'll say are negatives and what would be, in your words, "counter-intuitive."

If I could do it all over again, I would work harder at getting stronger and more decentralized responsibility and authority and would have held to accountability for the main producing units in the company. I think we lost a lot in terms of layering and remoteness, trying to give more central direction and, in this case–in the illustration we're talking about, the Paper Company–it added one more layer in there of organization. I think this subtracted some perhaps, from the vitality and leadership and the kind of direction that we needed at these units. This still is a problem.

To illustrate part of the problem, in Canada, we have a billion-dollar corporation. There's quite a lot of pulp and paper associated with that and we never have solved the problem how do you put a Canadian in charge? It's all Canadians that run it, but do you put in a Canadian management team with its proper connection with the provinces? That's not a one-part problem. That's at least a two-, three-, four-part problem in itself. Within provincial control of resources and regulations, they are very much more independent in Canada than here. So we have the provincial problem as between Saskatchewan and B. C., which is not easily handled.

We set up an overlay over there in Saskatchewan and then in B. C. and then reporting to a Canadian company, which overlays pulp, paper, timberland, etc. Everybody points the finger, "If you just put me in charge, we'll get this thing straightened out" and we never have. We still, if \_\_\_\_\_\_ you sat right down and said, "Is it well run up there?" I think the answer is, "no," partly because in everybody's business, the wires get crossed and it's very cumbersome.

Of course, you're trying to solve for the people, the local content, and the Canadian content and, at the same time, give direction from the Paper Company, timberlands or wood products from down here. It's frustrating. I'd say the Paper Company, to this day would say, "We've got a problem in Saskatchewan" and, I'm sure that Jack Waechter's answer to that would be, "Well you never really put us in charge." We've done everything we can to put that responsibility there, but they do share it in a sense with the Saskatchewan overlay and so, the job never has gotten done. So there are imperfections that resulted from-that do result and did result-from setting up product line kind of management, which the Paper Company represented.

I use that...there are parallels in wood products and timberlands, but they're not quite as applicable because in the Canadian situation we face on the timberland side, the character of timber and land management up there is so dictated by the fact that it is completely provincially dictated and owned. You do it their way, so it isn't a question of applying our management methods and our direction from say, central timberlands in Canada.

Pulp and paper is quite different with all its common products and common markets and so the Paper Company legitimately had a lot more to say and, should have a lot more to say, about the connection with Canadian operations than was necessary or appropriate in timberlands.

It's a little bit different in wood products in that the markets were common and the product lines were common. At least on the marketing side we had the problem of coordination with those Canadian mills that were producing a quarter or a third of the lumber that we were producing in later years so you did have a marketing overlap. Now the way we've solved for that is to pretty much allow the Canadians to sell their lumber and let the competition take place. You lose your disadvantage, if you had one, of central allocation, coordination, and overall size directing your market strategy. But what we really do is we sell it day to day in the same markets and we compete with ourselves which, in a commodity, maybe is tolerable. In that way, you allow our Canadian lumber business to operate as a lumber business, which is the way it's evolved now.

We've got Canadian, we've got West Coast and we've got South. In the geographies where they meet, they meet. We pretty much compete with one another. Of course, I can use that illustration in that any time we set out to organize one set of people, one set of missions and all the interfaces, in a sense...to some degree, you lose autonomy, direction and you get a degree of complexity that subtracts from effectiveness, I think. So there's no perfect solution that I know of. You always say, "Well, all on one tune." But the communication doesn't happen. I mean, it isn't just that they're trying to compete with one another, but coordination is a difficult thing to achieve and, it requires extra work and generally produces some degree of uncertainty and lack of decisiveness or smooth execution.

So I guess as you get bigger and these kind of organizational decisions have to take place-as I think back on this one and others, what you're trying to address is your sense of priorities of the time and what takes precedence. I think in that particular case, we were trying to get a tighter hold on the effectiveness and leadership on the paper side and some other things suffered as a consequence.

I don't think that we were terribly successful in trying to integrate businesses under the area management concept...earlier on a geographic concept either. We had various degrees of geographical authority either over all services, which we tried for a while, or in the Canadian illustration over the entire administration of the product line and the businesses. If I were to look at it today and look at not only the way we've organized the way that others have, I think the stronger competitors have a had a higher degree of decentralization and clarity of authority and a higher degree of independence in their operating entities than in our process of going through area management and "divisionalizing."

Now all these companies are the big companies and they certainly have operating divisions so that at least the marketing and the strategies are developed to some degree in product groups. We all have some of the same challenges. I think several of the competitors anyway, have had a concentration where they didn't have so many product lines or as many sharing the same geographies, so there were cleaner lines.

Now that's in contrast to the way, of course, Weyerhaeuser evolved. If you go back through history, we were trying to work from the forest forward and we have and, to some degree, continue to have more integration in the sense that our units are built around geographic units of forest, which we stick with and they have all, obviously, tried to add manufacturing and marketing units that drew from the same common resource that gave us security of raw material and we really had a kind of sharing and an integrated approach.

Maybe that's what you mean about contrary to philosophy, but the penalty of that is that there are some pretty compelling efficiencies associated with scale and geography and sharing. But the negatives, of course, are then that the units, in sharing common services and perhaps some common purposes that are area driven, lose some of their direction, independence and initiative in running their own businesses. That's the trade-off that we're working with and searching for.

Now we have a good deal less interdependence looking forward from 1985 and on to now, because of the forests in the West particularly, have moved from old growth to second growth and we are much less concerned with extraction of value from those old-growth stands which are very, very big differences, depending on what you did with them.

Units were designed around timber. Now we're working off material that is more uniform, a much higher percentage of the value of the timber that is coming out of those stands is going to market rather than to our own facilities. We're less integrated by virtue of having a big export business in logs and we tend to buy more material. So partly by virtue of the changing nature of our timber stands, we have less need for integration. As the big mills shut down, we can buy and sell logs and supply the reduced volume and the more common type of raw material that those remaining small mills need. Integration, in that sense, is much less critical. Washington State is where a lot of our timber values still sit and the current harvest is deriving a good deal of its value off its log marketing. So we've been able to set them up to split them out from the mills and it's kind of "willing buyer, willing seller." I think it's working and working much more efficiently.

So the timber people are in effect our marketers of their products and to the degree we need specifications for the mills, they can supply them or we can buy them and the mills are set up with the understanding you don't have to take anything. You specify what you need and then you're going to have to pay market value for it. We'll go out and buy it or we'll supply it. But I think the result of that again, is that we've turned the woods operations much freer to do what they need to do. Part of what they needed to do was get more specific response to precisely what the mills needed by making them more sensitive to the markets, including our own mills. I think they can accommodate and are.

If you look at the district foresters, they're running contractors; they're not running company crews. They are independently hiring for services and they're supplying the markets. I think what with the selection being made out in the woods instead of being sorted and resorted, we have a cleaner communication channel for the woods to operate under and I think the mills are going to survive or not survive, depending on how good a job they do buying their own material either from our woods or from others. That is opposed to going out and turning the loggers loose and saying, "Your job is to supply 100 million feet of logs and you go find a harvest and what comes

out, comes out." So their task today is much more disconnected and sensitive to what's going on and, I think therefore, a good deal more competitive in many, many years.

Now, that didn't happen because somebody invented an organization form that was perfect. But what I just described applies to the state of Washington only, which is a big export supplier. We have disconnected to quite a degree in the South in the sense that there is a lot more buying and selling going on. It's not to the same degree as in Washington, but I think the principle still applies. Our harvest rate in the South has gone down and we have been buying more material in a number of areas so that the "disconnect" between the woods and the plants is directionally the same. In other words, they're having to respond to the change in our raw material and they have to stay on the market so we're aware...both on the buy and sell side...I think much more aware of the value of the materials and, therefore, the woods operations. The mills are more discrete and more competitive.

## Interviewer

At first, when the reorganization took place, each of the companies was also, for example, publishing its own annual report and that continued for three years as I recall. That is not happening now. Was that a calculated decision to allow a psychological separation in the broadest sense of the term, even to the degree of a separate annual report? If so, then why was the decision made to go back to one annual report, for example? It seems to be letting out a little bit of line and then pulling a little line back in.

## GHW

Yes. I don't know the answer to the last half of that question. I think it was conscious and it's a natural result of all the trappings around responsibility, including communications internally. It was very much, in terms of titles, communications, morale-building. Now I would say, it was overdone, but there was a certain amount of team-building and ego trip associated with more narrowly defined set of purposes and a team in charge. You had more room for more heroes.

That had something to do with the personalities at the time, too. I didn't do anything conscious in terms of succession planning to put it up that way. It just so happened that the primary guys who had been the key people working for me were all pretty good candidates to succeed me and so some of that was going on during this five-year period, too. Not because I necessarily in any sense wanted to amplify the competitive aspect of that. I think the responsibility side of it, yes. Bob Schuyler was very much interested in cutting his spurs away from the financial field and with the Paper Company, so he was amplifying what was the natural tendency over on the paper side. They always felt, way back from the first pulp mill, although it was never conceded [in this company] that they were different and I mean right from the first day. Whether it was the way we went outside for everything, obviously, in the early days and then the kinds of people, the training.

## Interviewer

I guess that's why it seemed so "counter-intuitive" because your Dad spent an awful lot of time trying to build bridges between the folks in wood products and the pulp and paper side, and the resource side and the people in pulp and paper.

## GHW

He never carried it off, though, because as close as he was-and I think Howard Morgan had a lot of respect for him and worked well with him, but Howard was just as independent as a hog on ice when it came to other divisions.

## Interviewer

So what you're saying is this is, just a continuation of historical reality?

## GHW

Yes. We had a healthy degree of independence in the old-line managers-geographic managersand they maintained that with Charlie [Ingram] right up through the relationship with Charley [Bingham]. There wasn't any question about who was in charge and we answered largely to no one other than up that line.

Now corporate departments, there was a long history of various failures in terms of leadership or acceptance. I don't care whether it was industrial relations or other things, this company was not entirely successful at centralizing, I guess. That isn't to say that when they wanted to make something happen, they didn't, because with Dad and Charlie, there wasn't any question about when they wanted to move, we moved. That did not certainly lead in the later years to any great acceptance and/or warm embracing of corporate staff departments by the field. My view of it would have been that we had programs and things going on. Some were well done, some were not, but the manufacture, buy/sell responsibilities were pretty clearly decentralized and I say to myself, "Well, okay, the pulp division was just one more decentralization"...in a sense doing their own thing. Now it was multiplied geographically and they had their own team. We used to share some times together with the pulp and paper people under Charlie's [Ingram] auspices, but the independence in those units was still very, very strong right up through all my time. So I guess what I'm saying is, that it worked reasonably well and Dad and Charlie could make things happen and we didn't have a gigantic corporate set of overlays. The functions that needed to get carried out on a corporate basis, I think, were reasonably well led and got done.

As we got bigger and bigger and acquired and spread out geographically, that got harder and harder and it didn't work nearly as well. Then all these reorganizational phases I took us through (sometimes through and then reversed), I wish I could tell you I thought they were built around some really solid set of concepts that survive and prove to be right. But I think the honest answer is they were generally...each one of them was addressed to either problems or opportunities of the moment and the moment maybe lasted five years and a lot of the next movement would sacrifice some of what you did before or reverse it.

## Interviewer

That's part of a dynamic organization. Any reorganization, and you have been through enough of them to know this is on a very personal basis, can have a pretty serious impact on the employee morale. That reorganization in 1985 was no exception to that. There were people in the company who were asked to change both the way they thought about things and, in some cases, to give up some things.

One of them was that there was a cutback in health-related benefits. Do you recall what kind of planning you did to try to counteract the morale problems that inevitably resulted, regardless of immediate impact? How did you deal with that on this scale? You can't walk around and talk to every single person.

## GHW

No. Well I can't really recall. I'm certainly aware of the morale problems continuing, whether we're under a reorganization or other guises. When you are in a major set of down cycles and certainly in the early '80s we hit a big floor and a gigantic change in markets, margins and growth rates, all of which puts on restraints. Growth covers up a lot of pressures and problems and then the magnification of down cycle is even greater. You have to correct the excesses and, certainly, we went through a long period of readjustment which included take-aways in various ways and periods of extended either low raises or freezes on salaries. Usually, we're cyclical, but we went through a very extended down period, then reentered it again on the tail end of the '80s, so we had two recessions in the '80s.

Reorganization, reduction in opportunities for promotion, wages and fringes, all of those things, some of which were take-aways and some of which were viewed as take-aways, produces a morale problem that is very real. I was more concerned–I still remain more concerned, I guess–about the extended period of it and the question of how to effectively engage knowledgeable people in the company in the process so that you can do it reasonably well and reasonably expeditiously.

The last one we did not accomplish expeditiously and I'm not sure reasonably well, even given time. I guess what I'm saying is that in answer to your question, I was, and remain, a lot more concerned with getting it done than about dealing with the consequences or developing a plan to deal with individual dislocations or morale problems. I guess that's just an honest answer.

Maybe we should have been more concerned about it, but I guess my recollection and still my inclination was that if I could have done it differently, I would have done it a lot more vigorously, instead of having sort of a "heavy, heavy hangs over thy head" over an extended period of time. I think that's very debilitating to people and the uncertainties associated with it are tough on morale.

To this day, we're still engaged in trying to bring back a common set of accounts and introduce the efficiency of a large organization with a common accounting system. It takes a couple or three years to do it. You say, "Well, you know, that's one of the consequences of letting people put in their own business-by-business," and the computer systems grew up. We knew we had commonalty problems, but we had a gigantic big computer system that we put in for timberlands and wood products and had General Electric design it. We had equipment that got obsolete and gigantic big systems with a change cost that was very, very large, so we didn't change it.

Of course, as the computer world has changed, there have been tremendous opportunities to get a much better use of the data base and commonalty and the communication links are easy, so you decentralize. Well, that was just absolutely contrary to everything we started to do and it wasn't that we were unaware of it, but that's an unintended consequence, so some extent, of

decentralization. If I had it to do over again, I think what you would do is you would try very hard to centralize the services, keep them under sort of professional direction and commonalty, and then work very hard at having all the authorities out in the field. That's easy to say, but that isn't the way this company ever works.

You know you can say the same thing about purchasing. Do you want to exercise central control? Everyone today would say in major companies [business with] preferred suppliers should be pulled together and purchases should work together. Very, very different than having a purchasing agent which is the way we grew up–good ones, excellent ones, scattered all over the country. They had committees that worked together to buy certain kinds of things to get common purchasing power. But that's sort of an illustration of the problem, I think. We let it grow and, then tried to pull something in. Let's take the computer. Maybe the new processes, new techniques, new equipment can permit you to have speed of communication, centralize something and still have the advantage of local fast response, etc. That's the best of both worlds, of course and that's what we're still fiddling around with trying to get into place here. I say that advisedly, but I know it isn't done yet. It's been a long time coming.

## Interviewer

At the time of the 1985 reorganization you created-and you mentioned this a little earlier-what you referred to as the "Executive Policy Council" which consisted of you, Bob Schuyler, Fred Fosmire, Charley and Jack Creighton. But oddly, I didn't find much that really described what you wanted that council to do. What did you want it to do and what did it do?

## GHW

Let's talk a little bit about personal style and philosophy. I think that the fact of the matter is I'm not a very great believer in committees or consensus decision-making. It was a communication center. I could and did use it for discussion, bouncing ideas off of, but I don't think that kind of a thing really functions as a committee unless you seriously charge yourself and the members to be engaged with the responsibility to make your contribution to it real and solid.

I think that the fact that you don't find much emerging out of that is a direct result of my whole inclination, which was I worked with them one on one. The decisions that were important to be made in each sector, I either delegated or we talked about informally and we didn't bring Paper Company problems to the Executive Policy Council. I'm not sure when we came to common corporate services or something that we didn't have valid shared concerns.

[This is a continuation of the interview with George Weyerhaeuser. This is Tape I, Side B.]

The main decisions and directions came segment by segment. Maybe I can say, to illustrate a frustration, I'm sure that the guys that worked for me or maybe the company, had to tolerate. Somebody would always bring up the subject, "Can we, or you, articulate a five-year strategy putting in perspective where the Paper Company is going to be and wood products? Lay out for us in modern terminology, a vision followed by enough discrete elements so that we perhaps can plan around what the Executive Council, or I, or the company, really has in the middle term."

We generated middle-term plans all the time. We had five-year plans, but they were built up from the elements, not the other way around. I think that was a source of frustration. A lot of people would say, "Tell me what you want to do." My sense of it was that what I wanted to do was have those entities plan their own strategies, articulate their own possibilities, choose the best of them and then let's see if we can then decide how and when we're going to implement with whatever capital is available, etc. Not the other way around. Not the corporation determining for you what your size and scale is to the overall entity.

People do that differently and I'm saying that all of my inclinations were to have those units, how ever described-they change from time to time)-generate their competitive position. Their ideas of what they could do to improve their competitive position or productivity, or whatever their expansion plans and develop a slate of their own priorities, irrespective of where the company was. They were to be examined on their merits and then we have investment analysis, etc. to take a hard look at the major directions to test their validity, their mathematics.

So I'm drawing a capital parallel to answer your question on the Executive Council in the sense that my own inclination then was, and still would be, to work with the entities and build a strategy and the corporation then would incorporate it into its five-year plan, if we thought it was appropriate. Sometimes they were modified, sometimes not implemented. My personal style, my inclination about how to run businesses is to have them run well-led, develop their own, then the response to that is a judgment call and that judgment does not essentially come from human resources, or research or finance. I guess the council then became a central advisory group for communications and that isn't to say that we didn't tolerate any discussion or debate or anything, but we were not developing the direction from that body per se.

## Interviewer

The interesting thing about it to me is that you would have been consulting with each of those people fairly closely in any case. That's why I'm a little puzzled by the formation of the policy council.

## GHW

Not only would it have been, I was and I did, so that I didn't change.

## Interviewer

That's why I'm interested in what difference was it intended to achieve.

## GHW

Well, I don't know if I can recall or answer you, to tell the truth. I think that it had a conceptual basis. There is a centrality to the company. It's not just, "What's George going to do next?" We were a team. I'm telling you that the realities are as you describe it, but they came to me individually. They would look to me individually. I would look to them for counsel individually and did before, during and after.

## Interviewer

So this was just a formalization of something that already existed?

## GHW

That's sort of the conceptualization of the fifth floor, or whatever. The company is a company and it does have leadership. There's a team up there. I had confidence in all of them individually and worked with them individually. I may be exaggerating with a little fuzz of memory that more substance came in there. If I had to think about substance, it would be more on the program kinds of things that we were doing which might apply to all businesses which would be supported by corporate staff efforts. Those kind of things. Then I kind of separate out the business strategies and the big, main events which, in my view are, "Where are you going to put the resources to grow?" Which did not come primarily from that process.

## Interviewer

Did you, as a result of the formation of the separate companies, find that you had less and less connection with the details of their operation? If so, did that make your role more difficult to define?

## GHW

The answer to the first is "yes." I don't know whether that's a function of the organizational form or a natural evolution through time with these guys in place and the intention that they take more responsibility in their organizations forming around them.

I think of one thing a lot of the guys missed and I missed it-isn't entirely due to the reorganization but we used to have the division managers come up and report. We would have discussions at the division level, which I define much more as being discrete businesses than the "Paper Company" which is an artificiality. I mean the Paper Company is a myriad of businesses, some of which are connected by some technology, but they are a lot more discrete than they are common. I don't know whether it was a result of evolution or reorganization. I suppose in a sense it was in that part of the fence building is, "We're going to work these problems and we don't necessarily think you senior managers have to hear from the individual businesses."

So Jack would report and they got more and more general. It's also true about the reporting, back in history-going way back now-some of the most useful information I ever saw in this company, Charlie Ingram had us making. We reported and charted every individual unit all those years. I missed that and why I didn't-with modern data handling you could handle it visually or in a lot of different ways; I never did. To this day, I miss it.

I guess what I'm saying is by the time you aggregate a lot of information at the Paper Company level, pulp division level or even at a division level, you're then relying on somebody's judgment as to what they tell you. You don't have to, but that's just the way it works. Are they paying enough attention to the discrete problem areas or not? I still, to this day, worry about that. I remember when we had 30 charts or whatever, one for every unit, every mill. You could see its costs trend, you could see its margin.

## Interviewer

I think it was part of what was called "Hell Week," if I recall.

## GHW

Well, yeah. But we got it regularly. We all had to show up at that. We had famous stories about Hell Week. There's a couple of guys that worked for me-Tony Bodick, who ran hardwood, came from the Roddis operation, got up there in the bottom of the Tacoma Building in front of 150 managers and he got to explaining how they were making a fortune by selling knotholes. He went on and on. This just absolutely floored the place [laughter]. He was serious. I don't know whether he was reducing freight or knocking the knots out or something. It was just unbelievable! This guy was working for me at the time. God!

## Interviewer

You might have decided to close some of the mills sooner if you had more Hell Weeks.

## GHW

Maybe. But behind Hell Week, what I'm saying is that even back a lot farther than that was the charting that Charlie had. He was very detail-oriented, but he had a pretty good system of seeing where we were headed. I guess the point is that...your question was, did you lose some touch and I guess the answer is, "yes," and that was the result of having another layer. Clearly we put another layer of management in there and we had too many layers in the aggregate, I would say in hindsight. Yes, personally, I got less and less. Maybe some people would say that's good because I couldn't interfere [laughter], had to rely on their sense of what they thought was important rather than what I did. It had that consequence.

## Interviewer

You yourself mentioned, and you said that it was unintentional, the fact that the organization set off what was a competition among three people who inevitably were viewed by everyone in the company and, probably the investment committee too, as those folks who were the possible successors. Weyerhaeuser had a tradition of bringing up from inside. All those people filled that bill. I don't know whether they looked at it that way or not. We'll have to ask them, I guess. Did it, in a way, serve the purpose of testing them? I mean as you look back on it, not as you perceived it then, but was it useful in that regard?

## GHW

I honestly have to say that I think it did more harm than good in that particular instance. It wasn't done for that purpose, but that was one obvious conclusion. They were the principal divisions-business segments of the company. I don't know that I've ever posed the question to each of them. Certainly they were candidates, possibilities. They surely knew they were. I don't think they were all equally interested in the job, but as far as improving my ability to make the selection, I would say that I don't think that it did. I worked with all of them for fairly long periods of time.

When you select a chief executive, there are many considerations that come to bear that don't have much to do with how well they run a division. At least they're not paramount, some of them. I think if I had it to do over again, you would sort of like to skip the competitive period. There are winners and losers that come out of that which...I've read and heard many stories of other companies. It's difficult to avoid. I don't think the creation of those entities either avoided the problem. I'm not sure it amplified it a great deal either. Maybe a little more obvious, a little more visible. But not an easy period in the latter parts of that. I don't know and I've thought

about it, too. If I had it to do over again, how would I have avoided that win/lose situation? But I don't know how you do, frankly.

## Interviewer

No. It may just be that it was more obvious then. There may have been the same kind of speculation, regardless.

## GHW

I don't think that you could have avoided it. They were all principals and they were all key guys that worked for me and obvious candidates. It isn't to say that there weren't others and, of course, we could have gone outside. We could have gone lower in the organization.

## Interviewer

Well, I've got some other questions about that, too, but I thought we would go on to a little bit of...couple of developments. I also organized some questions sort of year by year in terms of development and I thought we might tackle a few of those.

In 1985, you sold Combustion Power to another company. Weyerhaeuser had put a fair amount of effort in Combustion Power and it had shown a lot of interest in some of the technologies and the possibilities that it represented. That may not be the case, but as I read it, that's the way it seemed. Did the sale of Combustion Power in some way symbolize a broader decision about the company's commitment to experimentation with energy alternatives and efficiencies and so on?

## GHW

I don't think so. It certainly reflected a disappointment and a judgment that we weren't going to be able to take those particular technologies where we had hoped or as fast as we had hoped. It was an episode, not a disappointment or an abandonment of the company's interest. It was really two-sided there; there were two aspects.

There was the control technology around particulate emissions and efficiency and effectiveness around combustion of-well, in this case it was coal as well as wood. You get them mixed together because there is a firing and efficiency question and there is a handling of the emission question both. We went quite far along the line of development in terms of the emissions side of it and got commercial with it and put them into some of our own plants and had a number of other contracts that we were implementing at the time.

The longer term, more consequential, was that technology associated with the fluid bed and the combustion technology, which to this day I still think has great potential in handling a lot of low-grade materials. I don't know what's happened subsequently, but the idea of being able to have a controlled set of conditions on a variety of fuels, different kinds of fuels-take place low down on the boiler on that fluid bed with introduction of air and everything right in that mass-offered what we thought was and may still be, the promise of a much higher degree of heat generation captured within the boiler as opposed to out the stack and therefore, a much bigger BTU conversion.

In low-grade fuels such as hog fuel, that's a very important element because you're not getting a great deal of it. Then mixing with coal had another impact and, incidentally, we're doing that commercially at Columbus and elsewhere. You can utilize the steaming capacity of a boiler more effectively than you could on a single fuel. At the same time, you can control a variable in the fuel better and you can control the amount of unburned stuff, all of which was and is of interest.

Also you know, you can take various forms of highly variable fuel, variable moisture content. You could use debarked wet fuel, yard fuel. We're still generating gigantic amounts of potential BTUs around the circuit and, increasingly it is impossible to do anything–or very expensive to do anything–around landfill. My dream was and is...I don't know if it had much to do with Combustion Power, but it is the area that they were working in, that we find ways and means to become the local utility in the sense of having a wide capability of gathering fuels and making the investment. Instead of buying power and petroleum, my dream is to have the combustion capability to take a wide range of low-grade fuels and blend them with coal or whatever you needed to.

This fluid bed offered a promise of being able to be a broad spectrum handler of materials up to and including garbage. Conceptually at least, you had to be able-those boilers are so capital intense-to utilize the boiler at the same time. If you can handle fuel in the combustion through a wide range of variables, you can utilize the full value of that boiler and you can do so with only the expense of being able to put in controls. That's still, I think, pertinent and that's what we were trying to do.

Now the other thing, they had contracts with the government, too. My memory of the specifics is gone, but they were doing something on fuel bed coal burning that was under contract to the government. Maybe it was to control the emissions better and one of the things that people are doing now is, if you do a good enough job of controlling the combustion output, you can also put a combined cycle turbine behind it so that the possibility exists that to take the gas stream and generate electricity from the hot gas and then put it into a boiler so that you get two shots at it.

But to do so, you've got to control corrosion. There they were working with the turbine people and others. You've got a corrosion problem in the gas stream. So there was experimentation going on to see what bearing the firing in the fluid bed experimentally would do in combination with the flue gases so that you might be able to utilize lower-grade fuels in a combined cyclegenerating facility.

I think there's still great potential for it. I can't tell you today what we're doing about it, but we have been looking at it for a long period of time as have others in the industry and outside the industry, but not being able to generate off-gases and use those off-gases without all the emission problems. You burn the fuel without sufficient oxygen so you drive off the BTUs and then you use those gases, they're a lot cleaner, for the purpose of driving turbine and/or firing a boiler. There are other technologies that seem to offer promise and I think in that case, it offers at least the possibility that you could do that without these gigantic boilers that have to be able to take care of so much gas. I think you can do it on a scale...it's like one-tenth or something like that the size of a boiler...and then get the efficiency of a gas boiler instead of an immense big boiler

that you throw a lot of fuel in and hope it all works out with a tremendous amount of metal and capital investment that is involved in one or two boilers.

## Interviewer

So in this case, it was simply a matter of having gotten a certain amount of benefit from this investment and refocusing your attention on other things.

## GHW

I think that we thought the fluid bed and the turbine work and all was important and valid but off in the dim future and not coming fast enough. As we went along, we got farther and farther-the business went over farther and farther trying to make a living selling these dry scrubbers. The basic longer-term research didn't seem to offer enough promise or fast enough, so we decided we weren't going anyway just on the scrubber business and found somebody that wanted to take us out of it. I would have to grant that we went into it with more than the idea that we were just going to have a little business and, we went out of it somewhat discouraged about pulling that off.

## Interviewer

Well you obviously got knowledge out of it and got some applications.

## GHW

Yes. Yes. And we continued to work hard with a pretty darn good group, I think, on the technology side of it which really turned its direction to combustion control instrumentation and we've improved the ability to sense and control recovery boilers and are selling that technology. So it isn't as though we've abandoned the field. But I would say I still list that as close to the number one thing I would like to see us do a lot more of around places like Longview, etc. I want to see us have a major program evolve of installations that afford us the opportunity to handle local fuels, including our own. The economics are clearly shifting in that direction as landfills get more and more difficult. Obviously, there's going to be fiber recovery that's going up, up and up. That's just a part of the waste-recovery process, but I think that could be and perhaps should be, combined with the low-grade fuel recovery system that helps.

I read in the paper this morning that Bonneville Power is going to curtail delivery of power to the direct-service industries because they don't have sufficient water to take care of the fish and the turbines and I guess Hanford is down for some reason. They've got a problem over there so the region is coming up energy short now. We told them it was going to be short. I was on a three-man commission that the governors of Oregon and Washington [appointed]. They asked us to look at our atomic energy plants and come up with some recommendations about ten years ago.

Our forecast was that about 1990-1991 we were going to be short and we were too optimistic, or maybe pessimistic depending on how you look at it, about the rate of growth in the Northwest. We were wrong in that our projections were too ambitious about increased growth and increased energy consumptions, so we overstated the problem. But it's catching us two or three years later and the debate was, "What do you do?" Do you mothball or scrap them or what do you do? You know the great controversy of the WOOPS plant at that time. Now my guess is that one or more of those is, by the time the year 2000 comes around, going to be put into service. Now it depends on the public.

#### Interviewer

The political will. In 1986, the company emerged with what I think was a new corporate advertising campaign. I believe it was the first that had been done for a while and that continued a couple years later with the corporate advertising that surrounded the Olympics and the company's sponsorship of the Olympics. Can you recall for me what elements were part of that decision to move back into a more active role in corporate advertising?

## GHW

Same answer. Not really [laughter]. I think that we were becoming increasingly aware and concerned that the passing parade was heading in a direction that we really had to be fearful of. Namely, that the amount of time that had elapsed and the changing age profile—the new entrants into the population in opinion sampling—were showing very big increases in skepticism and/or ignorance about private forestry and forestry management issues. So we thought that our franchise had been largely lost and that the opinions in the Northwest, as well as elsewhere, were running very adverse to our ability to be able to continue to manage the forests. So we decided we had been in error to let it go as far as we had. I think the primary motivation was to get back into the forestry education field. Now we also mounted various product aspects on a divisional basis. I remember in wood products we had a large set of programs.

#### Interviewer

Yes, there were new products. I realize they were also part of that. I didn't mention those in this connection just because they were quite numerous, very diverse. I realize it was connected to supporting the introduction of those products and, also to supporting the introduction of the First Choice concept as it went across the company's products.

On June 28, 1986, you planted the 2 billionth tree...at least that was the public relations.

## GHW

Yeah, I think we would be hard put to prove that [laughter].

#### Interviewer

That was the PR behind it and that tree actually is planted in the blast zone of Mount St. Helens. While I realize that tree...by necessity there's a PR aspect behind it. I cannot, in my own view, perceive that this didn't have some kind of personal symbolism for you, for the company; something special. Do you remember how you felt about that and what it meant to you?

#### GHW

A number of purposes. We liked the juxtaposition with the devastation and do nothing, leave it alone, nature will take its course. That particular area at that particular time allowed us a chance to dramatize, we thought, the distinction between the trend in public opinion that nature can do no wrong. Here we are, way down the line in terms of intensive forest management and tree planting that has been going on for a long time. The numbers are dramatic. The continuity of the program and the contrast, as I say, with the devastation. And then we clearly said to ourselves, "Mount St. Helens in general affords the opportunity in a time-related sense to dramatize the

results of planting. So we're trying-we had in mind then and do now, to do what we can, part of which is exposing people to the continuing contrast.

A lot of our forestry tours and communications have subsequently been centered around not only showing the seed orchards, the nurseries, and then St. Helens, which becomes an integral part in the field here. Of course, the problem was tree growing, or the problem with harvesting in tree growing is, that it looks terrible and very few people have the ability to look through that to its conclusion. So we have the great burden of the visual devastation and then timber gets up to 20, 30 years old and they consider it to be a natural forest and you haven't got the credit. All you've got the credit for is ruining what was there before. So I guess whether it's a celebration of the 50th anniversary of the tree farm movement which we tried to make something out of and/or the size of our continuity of our tree planting.

Yes, sure to me, what was it... we had Dave Weyerhaeuser down there. He's been at it from the beginning and the Weyerhaeuser name and family. Of course, if there's one thing that we did in my era, we really moved up on the reforestation in a very major way. Well okay, that was associated with increase in harvest level, more intensive management, all of which I think was a very sound move. Certainly internally, the forestry program got new vitality. We did engage a lot of the people in the company in a new vision and new programs really did give us some momentum. So yes, I find it easier to align with our forestry efforts than any single part of the company because it's where we come from.

I think that certainly includes my Dad. They started very early trying to think about how to do things differently in a time when timber wasn't worth anything. In the early 30s, you could have looked back to 1900 and said, "Wait a minute." Most people think it was always onward and upward, but it hasn't been. We let a lot of land go back for taxes and even timbered land wasn't worth much. Up until 1940, you could have bought three quarters of Oregon for \$1.00 a thousand.

It was clear to the company and the people in our high-yield forestry that we had a vision we were committed to. We were going to put the people and the resources in there and it stayed there, so I don't think there's ever been a period of doubt about the commitment. Part of that is, I won't say it was miraculous, but I would certainly say that I recommitted the company to the course it was on and I think made it possible for-the result is what will happen in the year 2000 and the connection probably won't be made but it will be real because our future is like this instead of something else in terms of the resource base.

## Interviewer

I looked over your left shoulder and of the three things you've got behind your desk, one is the 2 billionth seedling later which is a nice comment on it all and I hadn't thought about that when I asked you the question.

## GHW

Well I guess part of the thing is how far we've come and how many negative aspects there are to using the resource. And it's going to get worse and worse and worse in terms of the multiple constituencies and multiple pressures on the land base, many of which are going to be against

harvesting. The commitment that we're continuing to make...I have to say is to risk...I think the risk used to be in the market somewhere. Now the risk is the regulation which comes from public opinion which is being dramatically influenced by everything you read and hear and smell' everything from  $CO_2$  to acid rain to wetlands. Each new environmental issue and the population adds to regulatory pressure and threat and the economics of growing trees are not going to permit endless set-asides.

## Interviewer

This is the end of Tape I, Side B

August 18, 1992, Tape II, Side A

## GHW

All of that is by way of saying that I personally feel closer to the forest side of the business because it's part of the family heritage and it's part of our stewardship I'd say and, I think it's been well done. I'm proud of it. I'm proud to be associated with it.

## Interviewer

The decline in the value of the dollar in 1986 did begin to bring for Weyerhaeuser some improvement in the environment. I was wondering what, if any impact that had, on the decision to seek listing on the Tokyo Stock Exchange that year?

## GHW

I'm not sure it had any, but certainly our continued success at adding products to our export list and successes in Japan over a period of time were what we had in mind. We feel that Japan is going to continue to be the fastest-growing economy and, by a very wide margin, the biggest influence on the import of forest products of all time. So long term, major to us, we think we're far better known than any of our competitors in Japan. There is not much volume done in the Tokyo exchange, but we're right up at the head of the list, at least in English, in the papers over there and so it's visibility. We felt it added credibility to the fact that we've been there a long time, we're permanent, we're big. We are clearly different in terms of our long-term size–any way you want to describe it–as a marketer in Japan. We like to think we're partners and we really are with the Jujo in many respects, which now is the largest Japanese paper company by virtue of merger. I don't think that anybody felt it was going to be an important addition to the stock itself. I guess the Tokyo market has gone off about 40% to 50%.

## Interviewer

At the annual meeting in 1987, you predicted with a fair amount of confidence that there were good times ahead and there was a "short" good time ahead. At that point, the board authorized the repurchase of some 10 million shares of stock. What was the reason behind making that move at that time?

## GHW

Are you sure about the date and the timing of that? That's interesting. I would have said it was later than that.

## Interviewer

I think it was 1987. I don't have my source with me, so I can't check it for you, but I'll be happy to do that.

## GHW

I could have been. We had some debate about that. If we're talking about the same time, anyway.

## Interviewer

Well, I'll check the date because I may be wrong on that.

## GHW

The stock went below 20 and I-and we felt it was seriously undervalued. But when you talk about buying your own stock, there's always a debate about shrinking the company. It's a valid question. We're trying to grow and borrow money. You can look at it from the point of view that there isn't any point, even in a minor degree, in decapitalizing or reducing the equity. Was it 1987 when the market took a big dive?

## Interviewer

It was 1987. The fall of '87.

## GHW

We had a debate about it and a lot of other companies at the same time announced that they, when that market went way off, had authorized the purchase.

## Interviewer

I guess the reason why it seemed a contrast was because of the prediction in the spring that things looked positive and promising and then in the fall, there was the repurchase of stock.

## GHW

There was just that great big dive in the market and I have to say I think it was-just looked at opportunistically and we thought, "We're going to issue stock for stock options." But as I say, it wasn't universally embraced or a "no-brainer" either. I did advise it and supported it and I think it was a good idea.

## Interviewer

In the following year actually, there was a stock split, I believe.

## GHW

Yes. We went up to 200 million shares, I know that. That move was also questioned. Why split the stock? Gee, I can't remember the values.

## Interviewer

When we met before, I had done a little graph for you of the stock price and I didn't do that this time. I should have done it this time so we could check because that would be helpful. It wasn't

a year that passed between the repurchase of the stock and the split. When you say there was question about the split, who questioned it?

## GHW

Outside; among the investment community. I'm not sure I want you to do anything with this, but let's see if I can reconstruct it in my own mind.

There was some concern at one point about the stock being very low and all the takeovers and the leveraged buyouts, etc. going on. I can't remember the timing, but we put out the stock rights. That was not, is not, without some degree of controversy, although the great bulk of the companies did so.

The rights trigger in the event of somebody acquiring 10, 15, 20–I think ours is 20–that triggers at a certain level. What it triggers then is the issuance of additional shares. In effect, it dilutes the stock when somebody is trying to take over. In order to do that, you have to have an authorized number of shares sufficient to take care of that. I'm not going to say it's tied directly to that three-for-two stock split; I don't think it is. But in any event, we did increase the authorized shares in terms of preferred and common for future use for acquisition and to accommodate the rights possibility. So somewhere in there all those things were considerations.

I think we took the number of shares up to 200 million and the authorized shares went up to 300 million, or something like that. All of that may have been tied in with that stock split as well. I'm a little vague about it, but that might have been part of it.

One of the problems is that any time you compare us with anybody-this isn't to be said defensively because it works both ways-it also gives us an advantage in certain periods. We had and have so very, very much more of our profitability that is subject to high cyclicality by virtue of the volatility in our main product lines. The benefit side of it, on the boom side, is great and that's pulp.

There's nothing more volatile than pulp and yet it's been a very good business for us. It has earned a higher rate of return than any part of the business. Well you have to separate timber out because timber is difficult to compare because the question is when you buy it...set that one aside. Pulp has been number one on beta or volatility so when we "tank" in the pulp business (we literally make a million and a half tons of it), we go from \$300+ million to nothing. If you compare us with International Paper or anybody else, there's nothing like that kind of sensitivity.

The second one is we were unintegrated or less integrated in linerboard. Linerboard would be our number two volatile business. Cyclically they do better, so if you want to be a hero, go out and crow about the years when they're on the up. And incidentally, they're about to go in an up cycle, so it's going to be interesting.

The other side of it is that right now we're doing better because the sick baby in the paper business is paper-fine paper-and that's much less important to us, very much less. It doesn't mean that I'm happy about the way it's performing because it's lousy in our case. Lousier than the competition even; not Boise, but there's your example. Boise has been a hero and they've made some very good moves and now they are losing money two years in a row in a major way. Why? They've committed themselves to two sectors: newsprint and white paper and both of them are in the tank. Okay. Is the company all that bad? My answer is, "no, I don't think so," but they're sure getting down. Now they're down to \$17 a share or some number.

I guess what I'm going to say is I don't know whether we have the right in the diversification moves we have made. Many outsiders credit...or lack of credit...for our comparative performance to the fact we've been too diversified, made too many moves. And that is somewhere between completely wrong and substantially wrong.

The problems we have had have been concentrated in the areas that nobody talks about very much. There are two. One of them is real estate, which was doing very, very well. It did for years. It's a business that we've done well at. It then went out of sight and is still out of sight. And yet, if you read what people say about Weyerhaeuser, diversification gets the blame and real estate, it seems to me, they leave it out of the discussion. That was diversification 20 years ago and we stayed with it. It earned its way in this company but it is one that took us down the primrose path this last time in the way that it never, ever did. The California market went, down we went, and we're still there. It's kind of interesting that the other businesses like diapers and the annuity business, the mortgage business, they've had some ups and downs but generally they're good earners. Yet if you ask the financial community what we should have done or shouldn't have done or whatever, the conclusion, I think, would be that diversification efforts in the '80s were the cause of our downfall.

## Interviewer

What's the other one? You said there are two areas of business that seem to be immune to criticism. Real estate is one, what's the second?

## GHW

I don't know about immune from criticism, they just are not up at the head of the list. We put a billion dollars into two businesses. One called newsprint and one is fine paper in Prince Albert. And that billion dollars is earning nothing. We brag about our newsprint business. It's competitive. Longview is a fine mill, well built, state of the art, but it just happens to be making no money. So what you've got is an aggregate of a great big amount of investment. Well maybe I'm mixing apples and oranges, but those last two are just a big amount of investment that is not diversification, that just is a load on the company. You can charge yourself 10% interest for a billion dollars, that's where the earnings are going.

## Interviewer

That raises another question and that is, a lot of the diversified business was sold off in the late '80s and the company line was, "We're selling it off because we want to focus our attention on our major areas of business."

## GHW

Sure. All I'm saying is that we had decided to do and have done it. I'm saying it was neither the cause of nor the solution to our relatively poor performance in earnings. There's a reason to shrink and get paid for, but that wasn't it. It sounds like they're at odds, which I find interesting.

#### Interviewer

Yes it is, because that's not the way the public sees it and I don't think that's how the investment community sees it.

#### GHW

No. It clearly is not...quite the contrary. I think that the investment community said we were doing poorly and then we're doing better. It is because we have responded to the criticism that we're too diversified and we are focusing, which I was party to and am sympathetic with, but it is not the solution. It's not the primary cause nor the solution.

#### Interviewer

When we are talking about the diversified businesses, can we talk a little about decisions that I found interesting in that they were made within a very short period of time and yet seemed to contradict one another. For example, in one case the company decided within the space of a month to hold onto Shemin Nurseries and then they sold Hines. Have I got that right?

#### GHW

Yes, that's right. We sold all the nurseries and the nurseries were all reasonably sound. That doesn't mean that they always made the same amount of money or weren't cyclical or whatever, but they were all sound. We sold them because we could and we have Shemin because we couldn't, so we're running it and, at some point of time, we will dispose of it. I don't know what we've said about that. There's two elements: strategic and then willing buyer or willing seller. At some point even we...we have been focused on selling these things that we have in queue. There are more and, in some cases, we will sell them come hell or high water. I mean they are enough of a problem or nuisance or something. In some cases, we're going to sell them for value. Case in point? The diaper business is running along doing a great job. We're at \$500-million-a-year sales rate and it's doing very well. We're selling it because it is salable and it's doing well. You could look at it and say, "Why? Why don't you stay with it?" We decided it is not necessarily a core business. It is not integral. It is a big buyer of pulp. We will enter into a contract with whomever buys it or the public, but we'll continue to supply–we hope!-and have a contract for some period of time...five years or so. That's just a decision. We don't have to stay in that business and to narrow our focus was another decision made partly in response.

We found some validity in the diversionary aspect in the amount of diversification we had management-wise and time-wise, so we changed our minds in a sense about the relative values and costs associated with a major amount of diversification. We went into a number of businesses consciously to try to get some continuous growth and earnings in non-related businesses. I still think that was valid and I guess my statement would be that several of those afforded reasonable returns either counter-cyclical or not forest products cycle. I guess if I had it to do over again, I think I'd do it...I would.

I think we clearly decided we were going to get in and put our resources in the main businesses, make them move up to the top quartile and concentrate our efforts there and that's the strategy the company is on. It doesn't mean that all of the peripheral businesses are going to go. That's certainly what we've been embarked on and our degree of progress in that is too slow in a sense, but it's partly that marketability gets to be an issue, or values, or both.

#### Interviewer

You have a long-term interest in some of these. The "blue sky" aspects of some of these seem to intrigue you. Does it make it hard for you to watch them cut the tether and let them spin off, sometimes failing, I imagine?

#### GHW

No. I wouldn't generalize about it. I don't think it's a matter of personal attachment. I have a lot more personal attachment to our core people and facilities. That is more painful, if you want to talk about what we have had to do in the way of people and community and dislocation. Part of that has nothing to do with external pressures or anything like that. It has to do with the inevitable transition from the old forest to the new. It was not news to me. If I could divine it differently, I would have. But I had a lot to do with how it arrived and when it arrived and the fact that we're still shutting down-pretty much through now-mills, etc. That has a lot more personal sentimentality and concern than some of the diversification moves.

On the diversified business, my only reluctance is associated with whether we are selling them as going entities. I have very little sympathy for fire sales or pressure from the outside, whether that's from the investment community or anybody else-selling a business because somebody thinks we should. That's more of a question of timing and how you do it and what you dispose of. It's not a matter of defeat or concern on my part because it's something we launched. It's not customary in this company, I'll say, or for me, but I don't have any overriding problem with it. I think a couple or three of these businesses we built up over a long period of time and I feel pretty good about it and I think they can continue to run.

Let's take Shemin. We had an interesting strategy and a dynamic part of the business. We built a team of managers up and went from one location to 15 across the country and in Canada. So you're starting up a series of small entities and, almost without exception, it worked pretty well. And I think they will be eventually disposed of as a going business. Did it make a difference in Weyerhaeuser's future? No. But I think it was a success story. I feel pretty good about it and I don't mind having somebody else run it, I don't think. It was really inspirational of one little guy with a nursery in Greenwich (Connecticut) that conceived of the thing and made it go.

I feel very badly about the various parts of the real estate business where we had reasonably good managers and long-term commitments. I guess I'd say, I think that's a really tough business and it's very cyclical, it's very capital intensive. I think we've done very well at it, but I feel badly about disposing of parts of it not because I want to hang onto them. It's just a question of the commercial building cycle being a disaster. It's more a question of timing than a reluctance to sell it at all. We, as a matter of fact, have not completed that now. So in a sense, we're like everybody else. The banks got stuck. I still can't believe it. We've been a prime borrower from the Security Bank for years and years and years and when they got in trouble-and they got in

trouble in the commercial real estate environment-it wasn't a question of who we were or anything else. They were just not going to lend any money on those kinds of properties. You know, here you are-we've never been in a position where our creditors-it's a funny feeling. It doesn't matter what your properties are or the quality of your management or your history or anything else.

#### Interviewer

What about the savings and loan...Republic National Savings and Loan? Can you put that business in the context of all the political and economic furor that has been attendant to the savings and loan industry?

## GHW

I don't know that I can. I think we were looking at it as a special kind of vehicle which tied in with our mortgage banking business and we bought it at a fire-sale disposition and what we bought was 15 branches of deposit-gathering in Los Angeles, which we thought we could run without any particular investment or risk and use it. We thought we could get in the business of adjustable rate mortgages without the risk that used to be attendant to fixed mortgages. We thought it would fit pretty well with our mortgage company business. We took it on after evaluating the assets and all that with a piece of goodwill in it, which is another way of saying we didn't pay anything for it substantially, but it had a negative net worth which could have run more or less perpetually, except the government changed the rules. Eventually we had to fund that negative net worth and then shut the whole thing down. Let's say absent the change in policy of the government and, we acquired it not before but after it got in trouble, so we thought a deal is a deal. It'll sit in there and work that way. We grew it. It just looked like a relatively low capital, relatively low-risk adjunct to the mortgage business which we had done well at and, as a matter of fact, continue to do well at. In a period when all the action swung over to adjustable rate mortgages for a while, the fixed mortgage thing, when interest rates went through the overhead and it just dried up.

I don't know how to put that in the context of the larger set of issues other than to say other S&Ls (and a lot of the big ones), got into development and commercial property loans and wound up owning a lot of non-liquid real estate. It was for the S&Ls and nationally, an absolute disaster. They were built on a very, very unsolid foundation...upward and onward. Lots of incentive to grow with very few requirements and the depositors are not at risk, so the government's holding the depositor risk so you can keep going onward and upward and issue CDs and they competed for funds and it was kind of a Ponzi scheme almost.

I don't think Republic was in it, but they were in various kinds of real estate lending in Los Angeles where commercial real estate tanked and so they wound up with illiquid. Not necessarily under our era very much, but prior to that...properties that were not generating income and so they, in effect, generated losses. They also got stuck with the liquid assets that had to be disposed of, which we worked during our period way down and so it was not a big deal for us going out. But of course, looking at it from the beginning to end, would you have done it if you knew? The answer is no, we would not. As I look at that whole scheme, a whole series of errors were made, not the least of which was increasing the Federal Deposit Insurance from \$50,000 to \$100,000. That was just political. You remove the discipline from the people that are putting the money in there and guess what? S&Ls are going to use other people's money with the government insuring it and who's going to regulate the risk? It was a bad scene.

## Interviewer

You may be running out of both patience and appetite for this and I still have quite a few questions, so I guess what I need to ask you is whether you'd like to think about my imposing upon you to do another session or how you would like to proceed. I don't know what would be the best for you, but I still have a lot of paper.

## GHW

You want to go eat lunch? I have some paperwork.

## Interviewer

Can I get you a sandwich?

Tape II, Side B

## Interviewer

Among the issues that come up on chronology, the next one on my list is that of the dioxin controversy which first became a public issue in 1988. At the time, Weyerhaeuser responded by saying that the number of parts per million of dioxin in the effluents were not considered to be hazardous and that there was, at least at that time, believed to be no harmful long-term impact. Then within two or three years, Weyerhaeuser announced that it would reduce the dioxin in the effluent by roughly 95%. Can you reflect on: (a) what the change in the position results from?; and (b) what technologies made it possible to both measure that and made it possible to remove the dioxin from the effluent to the extent of 95%, which is a very high percentage?

## GHW

Yes. We're dealing with the magnitude differences here in the detection capability, which is way, way ahead of the studies on toxic effects. The instrumentation, the ability to detect changed during the period dramatically. You're talking about moving from parts per trillion to parts per quadrillion and 95% sounds dramatic, but it's in minute quantities.

It isn't as though you were reducing your energy input by 95% or something like that. You're just tightening up and you're changing, in our case, the main way in which we're effecting. It is reducing the chlorine usage and you can do that in a number of different ways. We're doing it on both sides of the chlorine stage, namely oxygen prior to the bleach plant. Where we can, we're cooking longer and reducing the need to bleach by a relatively benevolent change in the cooking method. Where you have the capacity and the controls, you extend time and you go through a less harsh cooking process, thereby bringing the bleaching number, the bleaching need, down.

So you do more of it in the digester, less of it in the bleach plant and then we and others also are using oxygen as both a pre-bleach agent before the main bleach plant and during the course of bleaching. Oxygen is a partial replacement for the effects that chlorine has. On the tail end of the bleaching process, there are also things that can be done to change it where the use of chlorine dioxide can replace part of the need for chlorine at the front end and has less or no effect on the generation of dioxin.

So that's a whole series of things that can be done depending upon the configuration of the plant. The new plant in Columbus was designed with the most extended cooking possibility and oxygen, etc. In other mills, either changing the chemical staging (they're using more chlorine dioxide) and/or the introduction of oxygen, can be retrofitted in. I think there are also other changes in procedures that can minimize the generation of dioxin, all of which is in these minute quantities. And then of course, your detection capability is so you can evaluate where you are.

Now having said all that, the standards are differential in different places. But during the course of the last few years–I can't give you the dates–but let me say that the EPA's own study, or commissioned studies, have also raised how in their public pronouncements, etc. very substantial doubts about whether or not the previous tests were valid because they used concentrations of dioxin on the test animals that were far too high and there is a real doubt as to whether or not at a threshold level above the standards level now called for in the pulp mill effluents, there is in effect, any carcinogenic effect on humans. I've just told you about all I can recall about it, but there is very substantial, scientific doubt by the same people that carried on the initial experiments then later came back and said, "No. We think those tests were in error."

Now that has not changed public opinion or the requirements for chlorine-free pulp in Europe. I mean the Greens have the public convinced that it's a terrible thing and, therefore, there's a lot of purchasing power pull on chlorine-free-not dioxin-free, but chlorine-free pulp-which deals with the process. Now I think when all this comes to rest that the standards for dioxin may be too stringent for pulp mills. The industry...I think figures indicate that the dioxin...you know, we're talking about something like seven ounces by the whole industry in a year and that's something less than 1% of the man-contributed dioxin and ignoring the natural presence of it. So there is a lot of question about where the issue finally comes to rest. Now we didn't change our mind about whether or not dioxin. In fact, all subsequent evidence would lead to our earlier conclusions that it was vastly overstated, overrated, etc.

Now to the degree that customers require it, whether or not it has scientific validity, we are preparing to respond to it. Where the state requirements...and they are different in the different states we're in...articulate a standard whether or not it's supported now by the scientific evidence or whether or not the EPA at some point here relaxes its national standard. It isn't a national standard, but there is a standard and the states can go further, I guess may be the accurate way to say it. So you have differentials and there are lawsuits going on in the various states both to challenge the standards and also against companies. So the issue is very much up in the air.

Now what we're doing is wherever we're going to put in new installations, obviously we're going to overkill it, but we are not prepared to go all the way. There are ways and means of eliminating all the chlorine compounds out of the process, which are more expensive and less benign with respect to the way it affects the fibers, the yields, etc.

I guess as a matter of policy, we have not changed our minds and do not intend to, I don't believe, except that will obviously conform to the regulations. I'm saying it's my belief that those

regulations may well, over time, be eased somewhat. That doesn't mean that you're going to remove the scare or the customer requirements, so we are going to be at a couple or three of the mills putting in more oxygen and attempting to eliminate the dioxin generation. Of course, there are other compounds that are being generated in the process too that are of concern and are being regulated so that the whole cooking, bleaching sequence—so long as we're using the chemicals we're using—going to be under intense scrutiny and require better and better control and measurement in the mills.

I guess you asked the question in a kind of a "did we change either policy or philosophy" style and I think the answer to that is no, but we're doing everything we can short of elimination of chlorine from the process. Now we've got others, but dioxin is the biggest publicized and on the scary side.

You've got to be concerned about it, but we've also got chloroform problems. That word ought to scare somebody. In a regulatory sense that's where we're going to have to retrofit completely at Plymouth and Longview, the two mills that are the oldest. I think it's chloroform that's generated in those old hypochlorite bleaching stages; they'll be replaced. They'll have to be to get into conformance. I don't know what the next list of chemicals are. There are others.

## Interviewer

Is there any way to estimate what the cost to the company has been to meet this publicly perceived danger, which may or may not be a valid concern?

## GHW

Well, it changes through time. At the older mills, where you improvise and use different chemicals, what you've got is whole tiers of per-ton costs that are using substitute chemicals and they're big numbers. In other words, we're talking about millions of dollars per mill and I'm not talking about to correct the problem, I'm just talking about even to run it. So we're either having to use more expensive chemicals, lower rates of through-put or some combination of the two. But the larger problem is if you literally took the industry, including us, you're into billions and billions of dollars and, for us, chlorine replacement, we would be into the billion dollars categories plus operating costs, permanent increases in production costs. It's big for our industry. It's big for us to the degree that we're building a new mill or doing a complete replacement, it can be accommodated to bring the dioxin below current detection levels and within the regulatory standard. But that's not representative when you get down to parts per quadrillion or less that it's zero. And that doesn't satisfy some of the customers in Europe.

## Interviewer

In a case like that then, we're really talking about what has to be a pass-through cost to the consumer, or I presume it is. Maybe that's a wrong assumption on my part, but if you're talking about billions of dollars, we're talking about a pass-through to the consumer ultimately.

## GHW

It's a real cost; it uses the capital. It isn't automatic that the charge is passed through. You could take a lower return on investment and then it gets to be a question of, all right; where are the break-even points? Or where are the cost-competitive points across the world? Not just what

does the state of North Carolina require or someplace in the U. S. European requirements, probably in the European pulp mills on a regulatory basis, will be as strict perhaps, or stricter, but will they in Brazil and will they in Japan? Everybody isn't faced with the same problem at the same time, at the same cost. You can say, "In due course, if that equalizes out, the costs will be reflected in the goods and the consumer pays."

## Interviewer

I have not come across an industry response to these, for example to the dioxin issue that connects the changes that industry must make to these perhaps, unnecessary regulations, with increased cost to the consumer. Is there an industry association that is addressing that issue?

## GHW

I'm sure the API (American Paper Institute) has dealt with it extensively. They've certainly been both privately and publicly with the regulatory agencies outside. This is a major pulp and paper industry issue and they've been working on it since way back when the first scare took place, to survey every mill and establish a background with the EPA. This has been an open book as far as evaluation and detection. But that isn't to say that the industry has agreed with them, that there is a proper regulatory level, or that everybody is paying attention to them. Maybe anything short of zero still leaves a problem with the public or in the marketplace. I guess they have a problem in terms of the economics. As I say, it would depend a great deal upon what product you're making and what process you choose and it would vary by mill, depending upon what you already have in place. So when you translate the economics of meeting a regulation into what it will cost the public, that's an interesting challenge about how to do that.

## Interviewer

It may be impossible to do.

## GHW

It kind of boggles the mind. Just to pick a number, \$10 billion to reduce it in the effluent streams. Let's say there are 100 mills and the average mill would be putting out 20 million gallons a day, so you're talking about two billion gallons a day of effluent, times 365 days and in that is contained seven ounces of dioxin. The argument is about whether that needs to be reduced by half at a cost of \$10 billion. Of course, taking a Dixie Lee Ray approach to things, what we don't recognize is the occurrence of nature and the ambient occurrence in many cases. If it's toxic, it's bad. But there's some level that is tolerated, that the good Lord tolerates in nature. This is a prime example though of "the" hottest issue and "the" most minute quantities and "the" most economic consequences of this industry that you can describe worldwide, so it's really interesting.

## Interviewer

As you pointed out, I'm sure it's not the last of them either.

## GHW

No. No. There's a whole course of them. Now there's 1,500 chemicals or something like that are now under a toxic and/or regulatory process. One that our industry uses a gigantic amount of and generates is formaldehyde. It is ubiquitous; that is, really extensively used. I'm not sure what the natural background of formaldehyde is in nature, but I know that it's used in all kinds of

processes and it's a primary constituent of the adhesives that we put wood together withplywood and particleboard-all those things use urea glues.

Urea formaldehyde is probably the most commonly used. I don't know where the regulatory processes come to rest there, but you know that's one that we had a lot of problems with in the sense that once you put it into a product, it still leaches. The biggest problem area there has been where you had a well-built mobile home all encased in plywood and not enough ventilation and there-whether out of particleboard or plywood or whatever-there have been effects. I don't know how serious or permanent the effects are, but they're significant on people. Here's one if you had to replace that, that is a common-very, very common-adhesive. It's significantly easier to work with and cheaper and everything else, so you would change the nature of the business. It is particularly important to the wood industry because we use a lot of adhesives to put our products back together again.

#### Interviewer

We've referred a couple of times to the fact that the upturn at the end of the '80s was all too brief, in fact, late '87 through '88, and continued to rise for a short time in '89. In fact, it brought Weyerhaeuser sales to over \$10 billion a year in 1988. Nevertheless, the margins on that \$10 billion were still not where the company wanted them to be and, unfortunately, the whole economy started to take another dive. In looking at that very brief recovery, can you identify what the major impact was in that there was not an ability to sustain that level of sales to the point where the return could be maximized? Were there some things that you needed especially to do at that point in the company's growth that became difficult to do because of those circumstances?

## GHW

You know, there are always things that you should be doing and you want to do to some degree. Our businesses are dependent on the cash flow. It doesn't mean that you couldn't borrow the money, but you're working within credit ratings, in general degrees of constraint that are set. They can be self-set, there's sort of a "prudent man" rule that says you're going to follow appropriate sense of retaining your ability to borrow money and at a reasonable cost.

So a lot of things when you get into a period of declining earnings and declining cash flow, things get deferred, get pushed off. The capital spending programs get affected; either delayed or canceled. We did some of all that on these down cycles. That comes at some expense, comes at some delay in the upgrading of your product and your facilities. This is something you have to live with, I think. Typically, we and others, when those cycles come on like that, you're generating a lot of cash flow and you're implementing engineering design and studies and you're starting construction.

The best example I can think of is not the late '80s, but the early '80s cycle where we brought Columbus on-stream and we were going to bring the pulp mill in behind it and having to delay that-we did delay it-dearly cost that integrated operation. They chose to operate the paper machine without ever integrating behind, which turned out to be an expensive middle-term penalty that we paid. Now it's going and everything's fine, but there was a dramatic difference, let's say, in present value of what we invested in when that paper machine went down and there's no way to buy those five years or whatever it was. You've got embedded capital that isn't performing up to capacity. We were paying for a lot of excess design for future expansion, which just stretched out. That's one example.

#### Interviewer

I was just looking for something that you personally had thought of doing when sales did start to rise and things looked better. Whether there was something that you had...at least in your own mind identified...that you wanted to accomplish in that period of time that suddenly became impractical. Maybe there was no *one* thing.

#### GHW

No. I don't think anything looms out on top of everything else. I think the things that hurt the worst are the things that you're in midstream on and then it's badly stretched. Of course, one of the things that you should be doing all along...you concentrate on in those periods...they are the efficiency and effectiveness kinds of things. So instead of building for the future, what you're doing generally is, and probably quite appropriately, trying to improve your performance with a minimum amount of capital. You're not trying to grow, you're trying to be somewhere between surviving and improving your competitive performance. It's not peculiar to us but that is what you wind up concentrating on, which shortens your time horizon and focuses your attention on here and now and what you can do in the short range. All of which results in improved set of performance as you come out of that period. In other words, it's not all wasted, the fact that you concentrate heavily on productivity. On the other hand, it takes a lot of the longer term and the strategy and the developmental and things that will determine over the longer pull how well you do and pushes them into the background somewhat. You know dramatic examples usually are the first things to go or development work or research, new product work, etc. Just as a generality, we're no different than others; we cut back on all that.

## Interviewer

This is where I have some personal bias and need to watch out for. The term "total quality" was introduced in 1990 and it was not intended, as I understand it, to interact with the concept of refocusing which had to do with improving productivity and changing the company's view of how it operated in terms of efficiencies. But somehow these labels and terms that I know have a communications benefit, it gets all tied up it seems and I've had trouble in my own mind trying to sort out what "total quality" was really supposed to mean and what it is in the long term going to mean to Weyerhaeuser. What's your take on total quality? How would you explain it to a cynic?

## GHW

Well, I am a cynic, so maybe I can explain it. Oh sure. There's a certain amount of aura around the term and there's a certain amount of fad associated with it. I can understand how they get kind of mixed up in Weyerhaeuser because at the time that Jack Creighton and I were looking through at each business, we were trying to evaluate where we were competitively in every business; trying to benchmark ourselves against the best of the competition. And instead of just saying, "Well, we're average or better" or something, we were trying to develop a conviction about what needed to be done in each business. We were trying to take a template of the best of the competition and in this regard, this regard, this regard, this regard, we're either up here or down here and we're going to move up into the top quartile in every business and we're going to decide which core businesses we are going to be able to do that in and how to do it. Call that

refocusing, if you will. You've got to decide where you are in order to determine where you're trying to go and then how to go.

Now with "total quality," the beauty is in the eye of the beholder. My own feeling about it is that it is a continuous process of examination involving everybody. In other words, in refocusing we attempted to look at the businesses piece, by piece, by piece and through their eyes and at the leaders and the engineers. So it's more of an evaluation process that we went through with some very good people assigned from our other businesses. It was internal with a couple of external team members, but the internal teams were multi-disciplinary and multi-business, so we didn't let the business look at itself. But it still was, in a sense, a top-down look, a multi-disciplinary look, a true attempt to get an evaluation of where we were.

"Total quality" in my sense sort of says, "Every aspect of what we're doing, we're going to look at." The "we" in this case is the people that are doing it. It keys off of a sense that everything is aimed at one objective and that's customer satisfaction. You start with a careful evaluation from your customers and with your customers of their requirements. It's got dimension that is outside of your normal sphere of production and tries to extend out and evaluate what is needed as seen and defined by a continuous feedback loop from your customers in terms of service, quality and ideas. In effect, it couples with them to do the very most efficient, most effective way of meeting their needs. Then if you take that process back...everybody has a customer, whether they're internal or external...so that in a sense, everything you do is passed onto somebody else. An examination of that then says, "Okay. We're getting it right most of the time."

Total quality says to me in the companies we visited, they weren't talking about 3% to 5% improvements; they're talking about orders of magnitude change-down to zero defect. In other words, we're going to do it right, not the normal 90% or 95 or whatever, but we're going to examine the process by which whatever error rate is there exists and eliminate it.

The goals that the very good companies, I think, have achieved through this are magnitude changes because they look at it differently. Every business is different, but I'm just saying the lead companies that we visited were big, varied and dramatic in what they had achieved. Not over one year or two or three, generally we're talking about five- to seven-year periods in which their way of life had changed. The process does go back through that process until you come full circle. In other words, every task has all these various transfer points. You come back to the beginning and say, "Well, okay. What have we got?" and they do include aspects not only of how do I get that to the point of zero defect, but there are elements that are efficiency and effectiveness which are involved in our refocusing program, too. Okay. But my time line is way out of whack, so you get the just-in-time kind of fundamental look at how you're managing flow and inventory, but that's a set of techniques or methods that could apply to refocusing or anything else.

There are contained within total quality, a whole lot of elements that other people have applied in other circumstances. It's the degree of examination, improvement and the key, to me, is a real team focus on requirements and a disciplined process of examination which is iterative–I think I said a fad earlier. I don't really mean that. I think there's substance and Jack [Creighton] and I were not early converts in that process. We were among the skeptics and we had champions

within the company that had been at it for five years and so what has happened in Weyerhaeuser is that Jack got fully on-board and we've adopted it. And with a good deal more intensity, tried to make sure that we had it going in all parts of the company and there's some more centralization of methods. But initially I think, two or three of the divisions were way ahead of everybody else by one or two years.

#### Interviewer

Which ones are those?

## GHW

Well, I think the shipping container guys were up-front with the Paper Company. The Paper Company was generally adopting various parts earlier than the rest of the company. I think there were one or more corporate staff departments that were doing it. There may have been a division with the wood products group.

## Interviewer

Which were the companies that you went to look at and which impressed you the most?

## GHW

I don't know about most. Jack's probably gone to a lot more. We went early on with the Baldrige winners who had committed their companies to helping sell the concept and giving access and had training rooms. We talked to CEOs and the people. That's the bottom line. Where you've got guys that are in charge of major corporations that are dedicated and convinced and have made it happen, it's a pretty good way of convincing people there's something there to be done.

We visited Westinghouse, which had a very extensive program with training facilities in it. As a division winner, we went to Florida Power. Here's an utility where they were just absolutely "on high" about it and had dramatically changed their services out in the field. This was several years ago. They were all different-different sizes, different industries.

We came away with no doubt that it was something absolutely doable and maybe that's it. You've got to believe. I'm not interested in fads and concepts. I say I'm a skeptic–I just don't believe in slogans. I've been through too many of them. I wanted to be sure in my own mind that we weren't just going to embark on something to be one of the popular movement. It had to have some real substance. It has to have staying power. It is a way of doing things and it's a lot of training and it's a lot of follow-up and a lot of effort and a lot of time. Now when you do that, I think you've got something that is really solid because I think you have got a lot of people in the various parts of the company that really do know what it is they're trying to accomplish, instead of talking about broad company aims. What am I doing in a corporate staff department? Even, you know, what is our out-turn and why is it? How do we measure and evaluate the people that we're doing our work for? How do we understand where we are?

## Interviewer

I can see that imbues everyone with a kind of professional responsibility to his or her customer, as it were, to give each person that responsibility. But I can't help but compare the concept of zero

defects and the idea of cost benefit analysis for that with what you have just referred to dioxin situation as, you know, how much dioxin does God tolerate in the natural environment. Is there a point at which it's impractical to require or request or expect zero defect? I'm the last person to say that I want something to go out the door of my office without it being perfect, but the fact of the matter is, can you really, in a cost-benefit sense, expect zero defect?

## GHW

No. But...

Interview continues.

Tape III, Side A

This is a continuation of the interview with George Weyerhaeuser recorded on August 18, 1992. This is Tape III, Side A.

## GHW

I don't know that zero defect is the proper ultimate goal or that there aren't generally trade-offs that something less than zero done much more efficiently than getting to zero, isn't giving the customer something better than zero. The reaching for zero defect is in the examination of the process; to discover what it is that causes defect. Then you've got a question of alternative methods of eliminating the cause, some of which may be completely uneconomic, or all of which may be uneconomic.

## Interviewer

But you still have to understand the process.

## GHW

Sure, and if you say, "Okay, what am I doing? I'm keying on what my customer tells me." Maybe one error in one hundred is of no consequence, but "total quality" says I understand the process and I have it under control and it is repeatable, so it's reliable. In order to be reliable, for instance, on dioxin, we have to have measurement and control at the generating points and you have to be able to respond to that with a change in process. I mean before you're going to be able to live to any standard, you have to be able to measure it. You have to then be able to know what you have to alter to affect a change in the out-of-tolerance.

What happens is that as you look at those things carefully and you start narrowing down your process parameters, you get the whole thing regularized and under control. That isn't to say that in every case that every customer needs that degree of control, but what you do is, you wind up eliminating inspectors, retrofitting rejects that are sent back and customer dissatisfaction. It isn't the idea. To me, conceptually is not the idea of reaching for perfection in everything you do. It is really reaching for repetitive reliability. Presumably, you ought to design the quality to fit—if you only have one customer to fit—their exact requirement. So if the tolerance is plus or minus 5,000th, you just ensure then that you're reliable within that range, not 10,000th or something. I still say I'm a cynic. I don't like the hoopla. Personally, I don't like slogans and I think there's

some backlash, a little bit, on total quality across the United States as you know, one of those big kicks and we aren't going to let the Japanese beat us.

## Interviewer

Well, that's one of the problems with it. If you sell something so hard that people, I think, don't take one seriously. Given the people to whom you have to sell this program, which in this case really are your employees, it seems that the potential for backlash would be fairly high unless there's a pretty strong onward momentum and a fair caution in trying to put that message across in ways that people can grasp and internalize and acceptably internalize.

#### GHW

Exactly. I think we had that problem within the company in the sense that we were quite reluctant to impose it from the top down at the beginning and did not. There was a lot of decentralization. I think that says that even within management teams, we were not willing to try to sell a concept and get them going. They have to be self-energized and I think that goes right down to the individual. If all it is, is a sort of tutorial on how the concept works, it won't work. The way it works is when you actually carry it down and make it a way of management and by management, I mean personal management. It's not management of people, it's management of process by the people. They have to become involved and taught and it isn't the matter of the department head saying this is a good idea or the Paper Company or the CEO. The companies that we visited and, I think all the evidence is this way, were clearly a dedication from the top and so they didn't leave you any room for doubt about what they were engaged in, whether it was serious or whether there was commitment. In those companies for sure, it was not fuzzy. It was not something else they were doing; it was primary. And I think it took all of them several years and then it took us several years before we adopted it from the top and then Jack and the team, now every one of them has gone through the schools and all the top guys.

## Interviewer

What about you?

## GHW

No. Not me.

## Interviewer

Having done that then, who's going to watch this? Who's going to be the person or who takes responsibility for making sure that there is a continual renewal or encouragement?

#### GHW

I don't know. You'll have to ask Jack Creighton that. But there is.

#### Interviewer

It seems to me that's the toughest battle.

## GHW

I think it is and ensuring that the level of effort and training and involvement gets done in the first place. It isn't as though every place in the company–Jack bought off on it and was equally ready

to embrace it. There was a big differential even between divisions in some of these companies that we visited in Westinghouse. It seems to me that maybe the Cadillac division of General Motors went through it or something, so it isn't that everybody does it corporate-wide. And honestly, I think that's the case here now, but I'm not positive that everyone has.

## Interviewer

Yes. I realize that you're not in a position, that this is your responsibility now. In the mid-80s in the annual report, it was stated that Weyerhaeuser owned 6 million acres of forestland in the United States and by 1990, it was stated that the company owned 5.6 million acres. What happened to 400,000 acres?

GHW

We sold it.

## Interviewer

To whom?

## GHW

Oh! Everybody...different people. Maybe the single biggest customer is John Hancock, who are probably the biggest acquirer of softwood timber and timberlands in the last seven to eight years–West Coast, South, long-term investors, insurance company, pension money–they've gone into some of these limited partnerships in timber and in straight-fee ownership.

## Interviewer

On Weyerhaeuser's part, is that largely an effort to consolidate holdings by selling all pieces that are not integral?

## GHW

Right. Right. Marginal to us could be described as either lower site or remote location or scattered. Most of those acres-well maybe we sold some of those acres in the West where we were trading with the state of Washington or where we reduced acreage, we consolidated. So we've cut our property lines way down, but we also sold a lot of our acres in Mississippi that we had acquired over the years from Georgia-Pacific and scattered lands and we rezoned it and pulled our boundaries in. We felt we had more land and timber than we reasonably needed to support any planned facilities, so that shrunk it down there.

We sold or are selling lands in southeastern Arkansas, which are more remote from Valliant and back away. We sold a lot of recreational lands in northern Arkansas that got developed into retirement communities and that kind of stuff. Primarily, we sold because they are higher value than growing timber. It wasn't a big deal...20,000, but we sold 30,000 acres in northern California. We didn't want to be in California.

## Interviewer

That's still a big change for Weyerhaeuser in many ways in that the company has a long-term reputation for holding land.

## GHW

Yes. It is fairly sizable. I don't know where that 5.6 number came from. We have an acquisition coming up as I just read something about the total will be 6 million acres. I don't know.

## Interviewer

I don't know. That's the figure that was used in the annual report.

## GHW

Yes. That figures. I saw it, too and I think it kind of surprised me, too. We have some longterm lease land that we usually treat like ours in the United States-in the South-that is equivalent to fee, but anyway, that's what we were doing. It generated a certain amount of cash, which we were interested in and income. But generally, where we were disposing of land, if we can put it back into real estate or more timberland, we avoid the tax against the low holding cost. We try to arrange three-party trades where somebody goes out and acquires some land that we want and we can make a trade and avoid the tax as a generality, but some of this we pay taxes on.

## Interviewer

Among the more public issues that came up prior to your retirement from day-to-day management, was the spotted owl controversy. Could you, in brief, evaluate for me how you see the resolution of that issue and how it's affecting the company?

## GHW

I don't know how I see the resolution of the spotted owl. I think that we have a very bad unbalanced law on the books called the Endangered Species Act, which in its present form, does not allow any consideration of consequences...economic or community or anything else. The law now is such that very minor and obscure species such as the spotted owl can give rise to gigantic dislocations in terms of use of land and resources, water and everything else. I think the concept is supported by the general public in that they all love nature and that the idea of destroying something in nature is abhorrent to the public. Conceptually, if you're a long, long way from something, I suppose it's pretty easy to say, "I prefer not to have that happen; therefore, our laws ought to prevent it." The problem is, whether it's a snail darter or whether it's ten other things, as population pressures grow and we use more and more of the land and man occupies more of the territory, the consequences are going to change in a natural environment.

Change is going to bring with it-I would say both natural change and man-accelerated change-the elimination of species of plants and animals. I guess it's true that there are many more things that we do not know anything about on the earth than there are things that we do know about and those things are going to be affected by time and by use.

So we're dealing here with something that has in the aggregate, over time, an effect on resources available to us, on our standard of living. Those things need to have some balance in them. I suppose a good example in my mind is when you get down to good, bad or indifferent, a handful of fish described as a species that's facing extinction on the Salmon River or somewhere. Now we're dealing with energy supplies and water supplies for our agriculture. We're going to be releasing water through these dams and there may be 100 other ways to accommodate either reintroduction of that species or enhancement of other fish runs that might be both economic and

in every other way more practical than trying to restore nature to a point that's long gone. So I think that the balance in these things is way, way over on the side now in this country-but not this country alone-of preservation as opposed to some balance of use and nature.

I think that pendulum will swing. I think that on the spotted owl, as they get to know more and more about the spotted owl and its habitat, I think we'll find that there are a lot more of them around than people think there are. That they live in second growth, that the population can be enhanced by methods other than setting out nine million acres of land off limits for harvesting and other use. But I think that in finding that, it's going to take time. There's going to be a continuing tendency to preserve, as opposed to multiple use, and the net effect will be that public lands...and I don't mean to limit it to public lands, but certainly the public lands are going to be less and less used to produce economic products and more and more in a preserved status for recreation and/or just as much of the wilderness area is for non-use. That will reduce the supply of the timber, will raise the price of timber.

## Interviewer

That was my next question. Are there some benefits to Weyerhaeuser in all of this?

## GHW

Well, I wasn't really talking so much about Weyerhaeuser and all that as I was philosophizing about the whole process by which the decisions are cast, how legislation such as the Endangered Species Act comes about and, then once in place, is used by the environmentalists and is supported by the courts. There has been very, very extensive use of set-asides and control over use that, I think, never were contemplated when the law was passed. But to try to amend that, you got to be on the side of the devil so that it's going to come up and there will be attempts to amend the Endangered Species Act. Present administration will support that and will support it...try to push it. Most of the representatives in Congress would not jeopardize the anti-environmentalist vote. Much of the urban population has no particular touch with–economically or otherwise–the forest.

## Interviewer

Well, they do but they don't recognize it.

## GHW

Well they don't recognize it. Yes, they do, of course they do, but it's not up close. It's not one plus one equals two, so the realities are, there aren't going to be any heroes out there in the Congress correcting that situation. We're going to be going through a long period-this is the environmental age, not the age of, unfortunately, productivity and economics. I think that in spite of the fact that we're having trouble competing in the world to some degree, and we're having trouble creating enough jobs for our population and we're having trouble improving our standard of living-all these regulatory steps and impediments in the aggregate are impeding significantly that process of competitive improvement. Resources are important to that and the balanced use of those resources is important to our future.

This country, whether we like it or not, was blessed with a lot of resources, but we are not alone and we're not in the same status that we were in the past on having an overabundance of available
resources. We're inhibiting that future to the degree that we over-regulate. Now if you don't care about everybody, you're in the position to say, "I've got mine and what I would like to do is have it available for future generations," etc. and, "Don't tell me about the consequences of my using lots of products." We ought to be willing and able to pay for the cost of those. Those are all valid arguments. You can follow that line of reasoning, but in our industry, there's no question that it's going to shrink. This one act is going to dramatically shrink the industry's base in the Northwest and I don't think that's a reversible matter. I think it could shrink further, but I don't think the reduction in the Forest Service cut to around two billion feet or some such number is going to change.

# Interviewer

But then, that puts me back at the same question and that is, does it hold a benefit for Weyerhaeuser, given Weyerhaeuser's holdings?

# GHW

Yes. I didn't answer that and my answer is, if you leave the question at the level of, does the reduction in competitive supply enhance the owner of fee timber? The answer to that is obviously, in the first offer effect, yes. The second effect, however, is what is the consequence of those regulations when applied to Weyerhaeuser lands and other private lands? And then it gets a little less obvious and, particularly, if you include in that then a larger set of questions such as, what about wetlands? Now we're affecting our southern lands extensively, so as well as the western.

So it isn't as though regulations imposed in the first incidence at the federal level on federal lands is necessarily, if history is any guide, the end of it. That's just a step in the evolution and we're entering into agreements in various states now with the agencies of the states and with environmental groups and others involved in the state forest practices regulation. We are going to be: (1) unable to harvest substantial amounts of our land base and timber base at all; and (2) we will be restricted as to when we can harvest others by virtue of drainages and aesthetics and visual control over whole basins.

This will restrict the right of the individual property owner to harvest his timber except in the sequence that's acceptable to the rate of harvest in the whole drainage. We will be leaving timber along water courses. We will be leaving timber and paying taxes on the land and everything else along roadways for visual effect. We will be leaving it for owl habitat and, in our case, just depending on how they define the owl habitat, there could be 300,000 acres of Weyerhaeuser land immediately adjacent to the known owl sites. I don't know how many more owls are out there or how that regulation is going to evolve, but the point is, we may enjoy a 5% increase in price in western timber and lose 10% of the land base.

Everything we're doing at the state level-there are pressures at the state legislature level which are coming from the environmental groups on the size of a clear-cut, the protection of the waterways, the protection of roads, the protection of animals, the diversity of the stand and, of course, there is a lot of pressure in various places coming from various quarters to eliminate harvesting methods-the clear-cut for instance.

There are all kinds of bright ideas about how to leave certain kinds of trees and cut. All of this affects both the availability, the cost and the net value of your growing timber and managing these lands. All of which is a passing parade, all of the direction is negative after you got through your first order effect to shutting the government cut-down. I think this has much more of a regional– if one wanted to look at it carefully, it is much more a question of regional resource and regional policy and future sustainability or growth. All these other things, setting aside that one, are in the direction of some combination of ever-increasing legislative actions, regulatory actions and increased self-regulation on top of all that, in other words. So your license is being modified year, by year in a major way.

If you said, "All right now. If it takes me 40 years to grow a tree and if I knew how to extrapolate that line out there, would I? Should I?" Okay. Maybe the value of those is rising at a certain rate, which will offset. History will tell you the values of timber have had a real appreciation rate of "X." Maybe "X" is only 2% or 1%, probably the real rate of inflation or something like that, but it's been something above the rate of inflation. If you remove enough of that productive base and make the front-end investment the same, those returns are not dramatic anyway, by any test. The real rate of return on timber is probably somewhere around 6%. You can depress it to the point where you're a whale of a lot better off putting in a long-term government bond with lower risk and a 3% or 4% real rate of return. Anyway, that's a real concern to me because we don't know what's happening. But if the slope of that line gets steep enough, intermediate, and you say to yourself, "Wait a minute! We're going to lose half the capability," or something, you're not 40 years out, but then there's going to be a point at which....

We're ignoring that. These are monumentally different. The kinds of regulatory processes that are emerging in Oregon, Washington and California, in particular, I know don't have a hell of a lot to do with the spotted owls, but area all very much in addition to the endangered species. This is the whole balance of game management, water management, the air and appearance along super highways or from airplanes, all the public resources that are associated with it. A lot of it is appearance and these are regulatory impediments to optimizing forest management from a viewpoint of economics. Very few of them enhance it. They may enhance the public's use of it, but I don't know, we're kind of at the front edge of changes in regulation of forest management out here.

The South is very, very different. There's a different degree of regulation and tolerance. Not without directionally the same kind of movement, but very, very different in its current impact. We seem to be, people who live here in the West-there aren't that many people and they seem to be a way, way more attuned to natural, beautiful country maybe and so we're very much more inclined than the public is. We're very urbanized now. So the "Seattle effect" is there-are a lot of people moving in from the way it looks and they feel and they don't want to change.

# Interviewer

They want to close the door behind them?

# GHW

Yes. Every time.

**Interviewer** How are you holding up? Are you ready for a break?

# GHW

Well, I'm wondering when you're going to let me go home.

# Interviewer

Well, I know. Would you be willing to see if we could schedule another time?

# GHW

Sure. How much more have you got?

# Interviewer

Oh, probably another hour or hour and a half.

# GHW

Sure.

**Interviewer** Would that be possible?

# GHW Yes. I'd be glad to.

**Interviewer** I know your schedule is somewhat variable these days.

# GHW

I'm in and out.

# Interviewer

Well, why don't I see if I can give you a call. Is it best to call Marlene?

# GHW

That's fine; sure.

# Interviewer

This is the end of the interview recorded with George Weyerhaeuser on Tuesday, August 18, 1992. This is the end of Tape III, Side A.

This is an interview with George Weyerhaeuser on Tuesday, December 15, 1992. This is **Tape I, Side A**.

# Interviewer

The last time we met, we got as far as talking about the issue of succession and the kinds of problems that holds, especially in an organization like this one. In thinking about this, the first question coming to mind was, in the final analysis, how did you make a decision about the person you were going to tap in 1988 to succeed you? How did you choose Jack [Creighton]?

#### GHW

There were a lot of factors that went into that. I guess I could start by saying that I didn't have a template of perfection in front of me saying here are all the considerations by some ranking and weighting. I think I said the last time, if I didn't [I should have] I had three very able men who I had worked with for a long time, each of whom I felt had strong pluses and some significant minuses. That's a very difficult position to be in. I think often when people go on an executive search, they have worked harder at defining the job and the characteristics. When you're working with headhunters, I suspect that you'd have a process in which you don't bring any interpersonal judgment or certainly a minor fraction of it to the table, so that the job, the experience and the credentials of the individual, your reactions to those interactions which are relatively minor in the overall picture add up to, "This is somebody that we refuse to put in the top job."

In my case, it was much more a problem of judging leadership by long, long years of contact with them and I felt that all of them were qualified. I was not inclined to search outside. I guess it was the case that the Board also had a fair amount of exposure to all of them and so when my recommendation came to them, there was not a great deal of questioning, searching, inclination to look elsewhere or, to my knowledge anyway, to question my recommendation.

I guess I'm saying that both my exposure over a long period of time to Jack and to the company and the exposure of the Board to all the candidates made the final selection rather easy. Easy only in the sense that we didn't have a lot of long soul searching and arguments about it at the end. But in the process, of course, you've got the negative in that you have some very able, strong people who have been performing well, two out of three of whom are significantly, strongly disappointed. They all aspired to it, they all were capable of it, so in that sense, it was more difficult for me personally to settle on Jack.

#### Interviewer

What tipped the scale? If you could name a factor or two that tipped the scale, what would they be?

## GHW

Well, it's not one thing. There is no predominant; there are two or three. I think the breadth of his leadership business experience in different businesses, different settings and the independence of his position within Weyerhaeuser which added up to experience making judgments without a lot of consultation is one element of making decisions and leadership that put him in a better position. That's partly the accident of what he did before he came here and what he did here. That's partly a difficult call.

With respect to Bob Schuyler coming out of a very good job and a very important set of staff roles, it is harder to translate into the top decision-making job. Bob...it doesn't seem fair, but he worked closely with me for a long, long time and I had great confidence in him, but it was two of us, not one. That doesn't say that he didn't have good leadership qualities, did and does.

The other major consideration was whatever readings I could get on leadership style. I think both Charley and Bob, for different reasons, I felt were going to have significant problems with the people in the organization partly just on interpersonal skills or lack thereof. It was different between the two candidates. So I guess I'm saying I think it's not only the individual, but my best estimate about how the organization would be inclined to follow and work for the individual.

DTP•3275-2•7/26/2005

#### Interviewer

Did you poll the Board before you made a decision?

# GHW

No. I'm not even sure I did after to be honest about it. I don't remember, but certainly not. I was aware of individual Board members' opinions about the individuals over time. That comes about as a result of interacting with the Board over various periods of time when these guys were exposed to the Board in various situations and you get feedback–good, bad, indifferent–criticism, compliments. Through that process, various Board members, if they were left to the choice, would have made different choices, interestingly enough. So it wasn't that they made an unanimous decision that this is the better or the best of the three. It was that they went along with my recommendation and in some cases, in spite of their preference for the individual, but not in the context of "Is this your man for CEO?" when I asked you to consult with me A, B, C, one at a time, I didn't do that.

#### Interviewer

It seems inevitable from an outsider's perspective that at least one and perhaps two of the people who were not chosen would leave the company as a result of not being chosen. I think we talked a bit about that. It's no surprise to me-maybe it wasn't any surprise to you-it wouldn't be long before, for example, Bob Schuyler chose to leave. Had you talked with him about that beforehand?

### GHW

I don't know that I posed it that way because my strong inclination and desire would be to encourage in every way I could to stay onboard. The fact that there was a new CEO didn't in any way reflect on the fact that it was a wonderful company and he had the top job and was performing well from every point of view. At least from my point of view, it was all positive to try to keep Charley and Bob engaged. Certainly the possibility of one or either of them, not only entered my mind, I thought there was a strong possibility that no matter which way I went that one or two might drop off.

Now the fact Bob chose to, as early as he did, maybe has something to do with the fact that he had a set of experiences and skills that were applicable to a lot of other situations, so he could realistically expect that he had other options. Bob wanted to run a company and in effect, I denied him that chance, so I guess it did not come as a large surprise to me, but a big disappointment. I still feel that he is one of the finest guys that we've ever had in this company, so it's not an easy matter, but not a surprise. He made it plain when I put him in charge of the Paper Company, that he wanted line experience. He wanted to be in line. He wanted to have hands-on. That was consistent. I was aware of all of that.

With respect to Charley, it was not so clear in my mind how he might react to it. I consistently have felt that Charley made great contributions. Again, a lot of experience and a tremendous amount of gray matter and ability to think through and articulate situations and subsequently to when I made the decision, I encouraged him every step of the way to stay onboard. I think that it was a very hard decision. He's got a lot of years in. He did not have to stay with the company and I think it was a tough nut for him to swallow. I think that in some sense that the other changes that we made during the course of this, not just at the tail end of the decision, in working with Charley-counseling him to some degree, both I and others-Charley became aware of what we perceived to be and other people perceived to be and reacted to, his method of communication and direction. It did some damage to individuals and perhaps broader, to the organization. Charley is too smart, probably too quick, and that's not an unusual combination; therefore, less sensitive and somewhat less patient and less communicative. Some would translate that to "more arbitrary," or "abrupt," or "autocratic," I guess. Those are characteristics that I was aware of, but not overwhelmed by. I think the strengths far outweighed the weaknesses, but that weakness might have interfered with leading the company, I felt. So I guess that's a dimension of the decision.

Jack had worked in a variety of situations. He had interacted in leadership roles in small segments of the company and not so small segments of the company and had led them. I think the scale up and the difference in leading the whole company as opposed to the kind of "hands-on-travel-around-and-manage-these-businesses-one-by-one" was quite a different matter. So again, it was a "no-brainer" that Jack had made that

DTP-3275-4-7/26/2005

transition and sailed right into it. There are no guarantees in this world. All of these went into the equation.

I guess I started to say that I think the fact that I knew them all so well and had seen them in different situations over such a long period of time, in one sense is a great advantage and in another sense it introduces all of the problems of personal chemistry and my biases into the equation. That would not occur if you were to go out to the wide, wide world and say, "Well, okay, here's the available people and here's their experience and here's how they're rated by history and peers." You're kind of an observer in that rather than the major evaluator. I didn't like it. I did not like the result in the sense of the breakage, but other people have faced this problem. I guess that when you set up a process, your key people are in parallel.

I would say that one of the things that I have never been able to do well, never was able to do well, probably never will be able to do well is handle a situation where there is a loser or a winner and many times over history as I promoted people and/or demoted in a sense, even if the demotion was parallel as opposed to down. I think of several of our top-flight people that did terrific jobs for us over time at periods in their career, I was not able to ease them across those kinds of changes or transitions without significant morale problems. A couple of times even when I had people reporting to me and they didn't lose any responsibility but reported one rung away and changed the organizational structure, it never worked well.

I guess it's because irrespective of what you're doing or who you're doing it with the distance from the CEO is a part. I think, an overblown part, but a very important part of the sense of—well, I don't know—I don't like to say "prestige," but I think it certainly is the importance in the structure or the importance as between the two of you as to how the job looks and interjecting somebody in the upper ranks in between you and them is very, very difficult.

#### Interviewer

How did you and Jack divide up responsibilities during that rather brief period of time in which you were "co-CEOs," I guess would be the best way to term it; when you were

DTP-3275-5-7/26/2005

working with what you called the Office of Chief Executive? Was there a formal sense of starting to hand things over to him during that period of time and how did you decide what you were going to do with each other?

# GHW

Not a formal and not even a thorough delineation. I think that during most of that period, what we were embarked upon was our restructuring, our refocusing program that we did together. In other words, we were reviewing each business against its benchmarking and against its perceived challenges, shortcomings, both by area and quantitative measure. We were mutually of a mind that we needed to turn over the rocks and turn them over very thoroughly and give new direction and set some new guideposts, both in terms of it's not being just a matter of savings costs or cutting out overhead, which is always part of the how do you get to this definition of needed service? Also, how do you get the clearest assignment of responsibilities? Those are always puzzles. So you have organizational issues, you have a certain number of people issues, you have a certain number of areas which are needing major or minor new efforts or definition of what the primary current objectives of the business ought to be.

So that was an extended process with these teams working and we were party to all of that. We went through it all together in the sense of the transition between what we had and what we were going to retain and what we were going to do with what we retained. Lots of companies go through it and we went through it together in parallel. We sat through it, debated, talked about it, listened to the recommendations of the teams and then tried to get the hand-off to the businesses to pick up on the recommendations. It didn't happen perfectly by any matter of means, but it wasn't, "I'm going to take five decisions and you're going to take five." We went through it together. If you lift all that process out, well yes, we were co-managing. We knew Jack was going to head it up. He had the staff assignment so the staff work that was going in there he was directing, but we had outside consultants and in terms of the decisions about strategic changes and/or business divestitures, we went through that whole process together. But that's the only "co" aspect of it. I didn't assign him. He was still running a good part of everything that was non-paper or non-timber, or non-wood products. Those he was

DTP•3275-6•7/26/2005

already responsible for. Well, not the general staff. So I didn't shift anything away from Charley or Jack Waechter or from Bob Schuyler while we were doing the study.

# Interviewer

Except at the time of the announcement was made about the formation of the Office of the Chief Executive, the Paper Company did go over to Jack [Creighton's] basket.

# GHW

Well, that's a separate story and I can't remember the time relationship.

# Interviewer

In the "Management Bulletin," the announcement appeared at the same time: The Paper Company would start reporting to Jack and the Office of the Chief Executive had been formed. Now maybe the decisions weren't made at the same time, but they appeared to have been announced at the same time.

### GHW

Well, I don't know at what point. I'd have to go back to see at what point I switched the Paper Company out from under Schuyler. That was a more important shift.

### Interviewer

To all appearances, at the same time.

# GHW

That's what triggered that. It was a different set of questions which was, were we going to continue in the mode that we had been in? I put Bob in there and Bob had created this and was working on this Paper Company President to give him a certain amount of experience in that area. That came to a crashing point of crisis where I was faced with a minor revolution from Mr. Waechter and the Paper Company guys, most specifically, Jack [Waechter], who was not going to work in that framework any longer. So I came to a point where I decided that I was not willing or chose not to risk losing Jack Waechter in that role. He and Bob Schuyler in that role was not going to work any longer. And as I say, I don't know exactly the timing there, I have forgotten. It might be that I made the shift simultaneously. I was thinking that was the important event and maybe a hiatus and then later on putting the Paper Company under Jack.

#### Interviewer

Well, I don't know in what order the decisions were made. I do know that the announcement to the rest of the company appears to have been made at the same time because it was in the same, "Management Bulletin" that it was announced the Office of the Chief Executive was formed, that the Paper Company was going to start reporting to Jack Creighton, and that Bob was going to be leaving but would stay on as an advisor until the end of the year or something of that sort.

# GHW

Preceding that—even if it hadn't been announced—preceding that, the scenario that I just gave you was taking place and it may be that Bob was still nominally the reporting officer, but was no longer in fact directing Waechter. Waechter may have been at that point, back in charge. He may have been nominally, but he was not in fact, reporting to Bob.

#### Interviewer

It seems like it was a tough period of time.

# GHW

Earlier than that...let me go back again, I was going to try to deal with the changes in Charley's responsibilities, but I can't remember well enough to recite it. I have in mind that Charley was certainly on track to run the whole company at one point, at least up here, and that got shifted off into a multiple choice. I'm not sure what organizational changes went with that, if any, but certainly putting Bob over the Paper Company was a part of trying to open up the race, so to speak. So if you went back at some point, I'm sure not overtly but to some extent in my mind and in the intermediate period ahead of all this, Charley would have been the front-runner, Bob a strong possibility and then all three [Bingham, Schuyler and Creighton] are in there in the latter stages of it. That is the way it all evolved over a number of five, six or seven years.

#### Interviewer

Did the Board pretty much leave it to you to decide when you wanted to shift gears and move out of day-to-day management? Is that anything that you discussed with them in advance?

#### GHW

Only to the extent that I shared with them some of the changes that I was making and not right at the last minute. The shifts with Jack in the last few years I discussed and the choice and then all that was leading up to retirement. I had always expected to and did assume that 65 would be it. I wasn't going to be the one to set a precedent for staying on an extended period of time. I think it came as a surprise to many of the Board members that 65 was it. I don't say that they were terribly reluctant about it, but it wasn't a matter that I debated about myself nor that I debated about with the Board So I would say it happened in the normal course of events. Then the transition, of course, we talked about and the various changes as we made them, but there was no two-party discussion about when I was going to retire. It was more of how to and what are we going to do and these intermediate steps.

Then we got engaged so heavily in the restructuring, as far as I was concerned, it was very, very logical as we came out of these reviews to implement and have Jack in charge after we came out of the study and had agreed where we were going to go. So in that sense, it was, I don't know if I would say fortuitous, but he came out with the... First of all, he didn't have a hell of a lot of background in some of these major divisions. So the process of reexamination or examination and discussion and then discussing the businesses what their view of it was [was beneficial]. We had study teams, multidisciplinary and outside participants as well as the businesses were all given a chance to both view that and respond to it. So through that process you get a pretty good idea of where they have been, where they stand versus competition and what we think they're going to do about it and what they think they ought to do about it. So going from there, it was a good base for Jack to get into the forest products aspects of the business though it wasn't confined to that. So that was pursuant to a recessionary climate. Our perception of a need for a thorough look at our competitiveness and conclusion that we needed to make a lot of changes and, leading into that, Jack with an assignment to take it from there. And we're taking about '89 to '91.

### Interviewer

I don't know how to phrase this except in a very curious fashion. From the perspective of someone whose entire career was spent in one organization. Whose life over the past three years had been dedicated full time to managing and running a huge ship, as it were, how did you feel about stepping away from the day-to-day, hands-on aspects of being involved with this organization that after all has your family's name?

# GHW

Oh...the feelings were largely associated with the personal relationships that are changing radically. So if there were or if there are regrets or concerns, they hinge around the ties severed by retirement, by the change in my position, by a whole series of things that occurred over a period of time. My sense of going through it and emerging out of it is more one of regret at losing those relationships, but that was occurring a fair amount before. It was a function of my being younger than most of the people, having been here a long, long time, not the ones that are still here. When you're in there 25 years, that's an element of probably being there too long. You're

DTP-3275-10-7/26/2005

attached to the people and I'll say the old ways, the old people, the old ways of doing things and the fun is associated with having done things together and to a certain degree that's a passing parade. You lose a little bit of that with each one of the key guys that go out and you don't reestablish with somebody that's 40 years younger. It's not the same. You can listen to them, you can interact with them, but it's not the same.

Those are the negatives that I come away with out of the process, not any regret about either the obligations of the office or the trappings that go with it. Most of that was not particularly interesting to me in the first place. I don't like most of what has to be done mechanically in the way of correspondence and communication. I like the personal and that's the way I worked with people and when we had a good, strong relationship it did not take a lot of detailed specifics, precisely what I see, precisely what I want done. It was much more my style to listen and interact, react in a discussion, the smaller the group the better, and all of that I guess I miss. But the major sensation that I come away with is one of relief of not having to go through all the mechanics, which is honest.

The other Boards that I'm on, which I still remain on, my sense is one of observation and interaction with relatively limited number of people and a relatively limited number of policy issues and those are just fine. I enjoy them. It's a little different when you've been CEO and then you become chairman of the same company over a new CEO because you're there and I've watched T. Wilson and others do it, that's a difficult role because in many things immediately you've got me and T., have benefit of or the burden of much, much more experience with people, situations, and the nature of the business, just by virtue of the way we come up. So then when you sit there on the Board, you have views which are difficult not to express. My whole inclination is to deal with Jack privately, but that's when somebody else is presenting something and you're saying, "Well, wait a minute. What do you mean?" I find it difficult to keep my mouth shut and T. not only finds it difficult, but he doesn't. Neither do I. I guess I'm the same way.

### Tape I, Side B

# GHW

And that's obviously a carryover of the conviction and the depth of involvement that you had at levels that are inappropriate. The information is good to have, but it's inappropriate for the Board or you to get involved in the same way that you would have otherwise. I won't call it a negative, but it certainly is present. It's a pleasure to be able to watch the process unfold and be able to offer advice and let somebody else worry about how to carry it out. The bottom-line is that it has not been at all onerous or difficult for me. People find it hard to believe that when you have been as busy for as long as I have that something traumatic doesn't happen to you in terms of having to have something to substitute for it. It doesn't bother me a bit. I can do what I want to do: travel, read, offer opinions. I still can't get the reading done. I don't mean Weyerhaeuser necessarily. I read a little bit in a book and a read newspapers. It's a disease, I guess, the reading habit.

If I have a regret in this, it has nothing to do with my change of status. It has something to do with the timing. I would have preferred not necessarily to go out on a high, but I would have much preferred to have Jack come in a climate of, "this thing has got some challenges," but it's been tough. I suffer in that mode for the company. I would have anyway whether it was Jack or me. It doesn't make me feel an awful lot better about it to have him in the driver's seat. Although maybe the next worst thing would have been to put him in the driver's seat and let him head down that hill as his first series of experiences for the next two, three or four years. But I think that that's going to solve itself. These cyclical moves are terrible and I think the fact that we had to go through a lot of change and a lot of restructuring, layoffs—that's painful no matter what. Morale is not all that good and, as good as Jack is, he's not a miracle man. I think this was just something that we had to go through and I wish they hadn't been concurrent. But Jack and I didn't have any doubt that we had a lot of work to do coming into this thing after 1988. As a matter of fact, I don't think it's anywhere near done yet.

### Interviewer

The Weyerhaeuser Board has been generally non-interfering in its role. At least that is what the minutes would indicate. (Of course, minutes have problems in indicating these things.) How would you view the role of the Board in the years in which you have served as CEO and do you see that role changing?

#### GHW

No, you can't tell really. Minutes won't reflect it even if the Board is in full session. And they certainly don't reflect the private actions and counseling.

I think the role changes with times and changes with people because Board members are advisors, counselors, and they play that role individually and collectively. Just like in any other group, there are leaders. Directional or policy changes are made as a result of some discussion and opinions and I'll say in that process of interaction there usually are a couple of people that play, in different issues, the lead roles in the discussion and what turns out to be the advice of the Board. Boards, the ones I'm on and this one [at Weyerhaeuser], have rarely been initiators of major directional change. Their role changes when it comes to selection of the CEO usually. They often, or for that matter, increasingly in terms of policies with respect to environmental matters, policies with respect to other public, legislative, and employee policy questions, Boards are concerning themselves more and ours is.

The Boards generally have broad backgrounds. This has changed dramatically in Weyerhaeuser Company over time where there's a lesser content of relevant forest products business experience resident in any of them. That's a consequence of getting independents and CEOs from other industries, etc. It's also true that even the long-time ownership interests on Weyerhaeuser are not people who have spent their careers in the forest products industry. So you better not expect to get that level of industry experience and expertise, which might be expected to initiate change in an individual business direction. Now, in terms of what the company is trying to do and major new acquisitions, directions, sure they get involved and they're helpful. We use them as a sounding Board, but by the time you come down to the individual decisions, they raise some pretty darn pertinent points which the management better think about and does

DTP-3275-13-7/26/2005

and responds to. So in that sense, they perform a role as critiquing what's going and initiating further work by the management.

I guess the change that I described there is a long change through a long period of history in our Board, but it also has been happening in the other big companies that I'm aware of because we have consciously shrunk the insider content and then the industry experience content is way down. If you go for generalists, whether or not they were chief executives, they're not going to be in your industry by definition or you've got broader and broader interests represented on the Board. We've certainly have gone through that kind of transition. The Weyerhaeuser Board back when I first went on it had a high content of ownership and a high degree of industry experience and opinion and I'm a long ways back. They got fully involved in a lot of the acquisition and/or major capital expenditures stuff.

Much more now a question of their asking the basic sort of questions about how you went about it or what are the underlying trends and assumptions and there are a number of things that are applicable to all different kinds of projects. When we get over into the mechanics of making the product, we go through it a little bit with the Board, but you're really not asking for judgment from them. A lot of it is background for them to get a feel of the quality of the management and the product. It's not an attempt to get them involved in the question, "Should we be building something different?" but more business direction. I see all different dimensions to that.

I can't remember, but I was talking to T. [Wilson] on capital expenditures. Let's put it this way, we float by, I think when I went on the Boeing Board we were passing \$700 billion with approval and authorities when in the early days our total capital budget in Boeing was under \$50 million! And of course, there's a parallel in Weyerhaeuser. I'm just talking about scale and maybe scale also brings with it a degree of complexity and experience or lack thereof, so if there was an opportunity to contribute in that framework of a Board back 25 years ago or now, you would require a degree of technology knowhow that none of the Board members has. It's so radically different by virtue of the size and scale and the different technologies that Boards in general, and certainly ours, need. It is very different. It is the change question and the other thing that I would put

DTP-3275-14-7/26/2005

in change is you do get a difference when you shift from ownership to stronger outside Board or non-ownership interest and broadly different backgrounds. There was a big change here and even in our ownership guys here. They're all pretty intelligent people and they served on the Board for quite a while, but they are still largely observers when it comes to our dealing with "re-lifing" Longview. They bring no background to it so you're dealing with, "Well what about the general competitive picture?" "What about the environmental picture?" "What about the labor picture?"

#### Interviewer

To what degree does the Board have an impact on issues related to international trade, global issues, the direction that Weyerhaeuser might take relative to its relationship to Japan or, for example, to the evolving European community?

### GHW

That's interesting. I never thought about it in those dimensions. These are businessmen, with a couple of exceptions, that largely have been domestically trained and oriented and inclined. I think the issues are guite different when you're an exporter as opposed to when you're an international company because you have an awful lot of foreign content in the thing, as we do in Canada not quite as foreign, but definitely foreign. Here we try to understand and interact somewhat with our Canadian Board and then have our American Board interact with them. Those are learning experiences and valuable ones I think. I guess I'm drawing a contrast. If we were to grow a lot outside of the United States, I think we would have to very definitely change our ways of doing business and we would be having different people, I think, either as regional Board members and a much broader background on the main Board. To whatever extent we were launched in that direction back in history, we backed away from it so I think that's academic. I don't think that means that we shouldn't have breadth and grow perspective because the world markets and the world economics and trade matters are important to this company and always will be. I think we're going to be a big exporter and maybe begin to go back to the international sourcing and converting in the future. But it hasn't been a big issue. I guess in a sense, Boeing is guite similar to us in that they're all concentrated in manufacturing and all the problems that are manufacturing and financing and everything else are largely contained domestically, even though they

DTP-3275-15-7/26/2005

are absolutely dependent on foreign markets and you see the growth that's being formed. So T. [Wilson] is not a great deal different than I am in that respect in that he brings a little international dimension to it, but the others generally stay close to home.

#### Interviewer

In one other interview with you that I read, you referred to the 1950s as the "Golden Era" for Weyerhaeuser. Do you still feel that way?

#### GHW

Well, I suppose it's the golden years of my youth and, in a sense, Weyerhaeuser's youth not in a timber-owning sense, but in a gigantic scale-up of activities and capacities and new locations. So "golden," I think was maybe the '20s or the age 20s for this company. This is cyclical. We've had very good times subsequent to that, but we had an awful lot of fun here in the '70s. I did and we did, so in all, I wouldn't say it was the only era that might have had a little gold associated with it. I guess I was so aware of the rate of growth and the number of things that were happening and the scope change that went on in the company. We really did become a national company then and we did become a pulp and paper company. All those seeds were really planted then in the '50s. If you just looked back and looked at it economically, maybe the '40s were dynamite in terms of the increasing value of the company; timber came into its own kind. So we went from a timber era to a national and paper evolution. Each period has its own. I think the '90s are going to be difficult, but by the time we get through them, I think the '90s are going to be a very positive period for this company.

I think that at the turn of the century we're going to see an explosion because of our timber base. It's going to really look and feel different. Now they're [the trees] getting smaller, but they're going to get many more of them and it's going to be interesting to see what evolves in the way of products because I'm absolutely certain that the geometry of tree is not going to be any longer the predominant issue. That's good. I think we know what we're doing when it comes to producing a lot of pounds and a lot of cubic feet.

#### Interviewer

DTP-3275-16-7/26/2005

You've mentioned several times today the people and fun as you would call it. If I think about one organization inside the company that has seen what I would term to be three totally different personalities all of whom, I believe, you chose to put in that place, it would be research and development with Larry Kulp, succeeded by Alec Fisken succeeded by Norm Johnson. I look at those three personalities and I think now those are really totally different viewpoints being brought to a function within the company, which in some way is one of the most important there is in terms of the future of the company. It certainly offers one of the more interesting possibilities in terms of the future of the future of the company and its direction. Can you give me some insight into how you chose to put those three people in succession in charge of that organization?

# GHW

It wasn't by trying to match personalities, you know that. I really think of the research organization as more under Stan Gregory than I do Alec. Alec had a breadth of background, marketing, and product-wise had done a number of different things and did them well. He had some balance of managerial, technical and personal skills.

Stan evolved out of the research organization and if you want to complete the personality comparison, you better go back to Clark Heritage. If you wanted to find a model of what I wish we could have replicated it would be Clark, which was a combination of technical skill, leadership and confidence-builder. I'm afraid I'm complimenting my dad [for having chosen him]. Also, the authority and responsibility that he had. That was the era in which we were not horsing around. We were trying to build technical and process skills that would lead to plants, by-products, utilization, and new products. Of course, Alec had some experience in that field as did Bob Pawley. To me, the exciting part of research is what evolves and what evolves or doesn't evolve should be new businesses or new products.

I think that was a golden era for us and that came out of the Wood Conversion Company. They were serious about creating businesses. Now, in the latter years we were doing a lot of good research that had no particular relationship to the business strategies and I didn't have an organization and I didn't personally lead us to pull those through. I think that's partly a function as we evolved and as I from time to time got frustrated with what was coming out the end of the pipe.

We put the businesses more and more into the mode of deciding what was going to be done or not done in research. We turned them into a technical service organization and then finally just split the research and put it into the businesses and it now has a very—I don't want to be too critical about it, but I would say a very short time fuse as a result. We did in this last go-round, really knock it in the head. There is a great deal of work going on over there that we no longer had champions for or no longer saw the avenue to commercialization as seen through business eyes.

So I don't mean that all the technical efforts in this company have been failures. They haven't. There are some good ones still coming, but on balance we, and I might say I think that almost every company that I have associated with have had some degree of inability to bring the technology forward and to forge an adequate link between technology and match-up with product needs of people or of our customers. There are very few companies that do that and do it effectively. Now obviously, the drug companies and others are a different ball game - 3M and others.

But the industrial companies that I'm associated with—Boeing spent an immense amount of money on product development, on proposals, on bids—hundreds of millions. They're working hard at various gigantic computer-aided systems and engineering. I see that as sort of controlling the process by which a product is created and that's what we got involved in, rather than product per se.

Still, that's my greatest regret is that we haven't done a very good job of leading ourselves through because there's no question that the tree is going to be taken apart and put back together again in all kinds of new ways and I think that we should be very much farther up that development curve in commitment than we are. We're busy trying to run the businesses we're in in a relatively efficient manner, so research is one of the things that doesn't get a very high priority. It's not short-time fused enough. I think realistically that seven, eight or nine years is an ambitious schedule for invention, creation, refinement, and development of a product.

DTP•3275-18•7/26/2005

That's about what we just did on the pulp fiber that we're so excited about. Literally, I think it was seven years. That's relatively good and relatively good, relatively innovative and it's going to work. But you know you're hard-pressed. I have to go back one or two decades to find that and when you get in an economic squeeze, the frustration level with that and with overhead expense in general (which probably gets unfairly assigned to as something that you don't have to do), gets first order, etc. etc. I think in this last time around we hammered it harder than any other area of the company and Norm did it. I give him a lot of credit. He was given that assignment and he carried it out. Norm is certainly different. He has a strong forestry and academic background and earth sciences, etc., but we ought to be using his background and skills to get us more innovation.

But the way we're organized, the way we make the decisions in the company about supporting programs and funding is all pretty compartmentalized into the business structures. God knows that we have a lot of competitive pressures and we got to make them perform so they're not very inclined to stick their necks out beyond the immediate. Now I'm exaggerating a little, but I don't think that's peculiar to where we are now. It's just one cycle. We've been through for several cycles in terms of carrying major projects. We've carried projects seven, eight, ten years and then finally pulled the plug on them.

Finally you get a hardheaded guy of some kind and gets in there, and I don't mean it's just the head of research, it usually has more to do with the businesses that are going to take the product to market or some combination there. So what we're doing is we're busy trying to apply the best equipment and the best technology that's in the field developed by largely outside supplies and if not outside suppliers of equipment.

There's a lot of process technology that we have observed being applied and we try to be reasonably fast. I say that because when you get to old and obsolete plants, you're not putting a lot of instrumentation in there that you would put into a new environment. The successful mills are being tightly run, ours and others. We have a lot of tools in both production and maintenance that are instrumented and many of which are closed

DTP•3275-19•7/26/2005

loop and the processes are under much better control. For the next three or five years, we're going to be completing a good deal of that replacement and new technology going into place, but that does not require an invention; that's an application job.

So I guess I'd say that we have been in many ways and certainly are now an applier rather than an inventor and we're trying to get better at that so that our technical people are working on today's problems, not tomorrow's products. That has not always been the case, but I had to go back to the "Golden Era" before I got excited. "The "Golden Era" in this case being really earlier, the '30s and '40s.

#### Interviewer

In regard to discussion about hiring people, some of the people with whom you worked and with whom probably you spent more time in your career than any other were people whom you inherited. As you mentioned, many of them were older than you, people who had come up in the company either concurrent with your own development in the company or in some cases, before you had started into the management ranks. Some of them were people, therefore, that you didn't really hire yourself and then there are other people with whom you did hire and some of those were people whom I would look at and say, "They were great successes." Somebody like Bill Ruckelshaus, for example, seems to have made a tremendous contribution to the company in the relatively short time in which he was here. Then there are other people like Ben Borne who was here for a very short time and clearly was not a good match with Weyerhaeuser.

Looking back, how would you evaluate your own performance relative to hiring people and finding associates, which is probably one of the most critical elements of a CEO's responsibility.

#### GHW

Well, we didn't hire a whole lot of people. There were some very, very obvious ones and the success ratio on those was... Give me credit for having hired them and that doesn't mean that I either discovered them or that I necessarily didn't have somebody else doing a lot of the legwork and the hiring process. But I feel, looking back as though

DTP-3275-20-7/26/2005

we did a good job in the main and certainly I'd like to take credit for Jack Creighton and Bill Ruckelshaus. You want to go back in the earlier stages, I don't take credit for hiring him, but certainly early recognition of Bob Schuyler who came from Potlach. I think it would be fair to say that I was his mentor for a good part of his career. I didn't hire Charley. He was hired as a lawyer. But those guys came up and I consider them successes by broader and broader assignment of responsibilities, so it wasn't so much hire as it was development, in Charley's case a lot of breadth and in Bob's increasing responsibilities all the way and he developed a lot of breadth in his job.

#### Interviewer

You did choose those people as associates nevertheless?

### GHW

Yes. I'm hard-pressed to think of people that I hire myself. I certainly participated in the selection of Cal Knudsen and Bill Ruckelshaus and Ben Borne and I also hired a financial guy in front of Bob who was a disaster.

# Interviewer

Who was that?

## GHW

It's kind of a joke. Ned Pugh. Marvelous credentials, I mean, academic and otherwise. I did the interviewing personally; well, I did part of it anyway. I feel that I made that decision. I had two or three candidates and it was absolutely a disaster. So, if you wanted to say that one that I would say I had maybe more individual responsibility for was the worst of all. We have had, through the years, a series of disasters in the personnel field going way back. We had industrial relations personnel who the organization wouldn't accept way back - Roy Dingman.

But it just kept coming and coming. Lowry [Wyatt] finally made the grade. I wish that I could take credit for having hired him, but I think that was Charlie Ingram. Boy oh boy, we had debates (I mean my dad did) about not only who, but whether. We had those

also in public affairs, successes and failures and debates in the early days about whether we should have the function.

The organization was able to reject people pretty handily. I would say that Pugh and Ben Borne were the two I had more to do with, who worked with me directly and whom I had let go. But on the internal successes and failures, my looking back and saying, "How did we do?" whether they were older than I was or not didn't matter in that mode.

We promoted a lot of people who were turned on, reasonably able, and I think did a good job and that's the fun part of it, I guess.

On the internals, I get some pretty good marks. The guys that failed, failed pretty fast. We didn't have them around here for decades. Ruckelshaus brought Ted \_\_\_\_\_. He's a member of the Democratic Study Committee and an absolute character, wonderful speechwriter. I would say that Bill probably knew all of that about him and he put some firecrackers under this outfit. He wasn't going to last forever.

I think of the people that did a good part of the job here, were here and got promoted and I think of the people like George Kovich and I think about Alan Smith and I think about Harry Morgan. They were coming up through the mill systems and were given business assignments or geographic assignments. Joe Brown—I had a lot to do with each of his moves and he was one that I tried to move way up. I got him, I would say, not over his head—he's a brilliant guy, but I think beyond his leadership capability. Maybe in the process it kind of fouled up. I had to back down. I had him over everybody, with John Shethar and everybody working under him, but I had to back down. But Joe did a good job in almost wherever assigned—North Carolina and went down South. He came up through the ranks, paper chemistry, was a shift foreman at the same time I was in Longview and went through the whole pulp and paper thing and up to the top. I'm hard-pressed to think in that group of key people and I guess I am talking about mill managers or region managers...

# End of Tape I, Side B

# Tape II, Side A

#### Continuation of December 15, 1992 Interview

#### GHW

...where they [mill mangers] either couldn't carry the responsibilities they were given or the organization wouldn't work for them or whatever. My sense is it was 90% success ratio on the internals. If we have a failing, I think it is and was, we were then and maybe now are, we were generally too slow to move where problems do accrue. I was, we are, were. We were slow to remove situations or mediocre performance, but the hard decisions about demotions would be the area blocking where I would give me a lower mark. Not so much a matter of poor selection, but tending to stay with problems when responsibilities just didn't get done well. I am thinking about it at the mill-management level and I think the same thing to some extent could be said about key staff jobs sometimes where we weren't as rigorous as we should have been.

#### Interviewer

The last time when we were drawing to a conclusion, when we finished the first group of interviews, I think the question that I asked you was whether there was one thing that you could identify that you felt particularly rewarded in terms of your career to that point. I find myself looking now at what would be the last four years of your association with Weyerhaeuser and asking: Can you identify something within that much shorter period of time that you think is an accomplishment in the face of an extraordinarily difficult set of economic times?

### GHW

I suppose my answer to that is there's hope. Some of these things maybe take longer to make you sure that they're going to be important and sustainable. I absolutely feel good about the effort I was describing earlier that we undertook. I'm much less satisfied with the execution against the benchmarks, which is to say that's one thing to identify and another thing to correct. I think we did not get universal acceptance of the assignments, let alone execution. So it's not something I'm cheering about today, but I feel pretty good about both the process and the necessity and I'm still hopeful that we haven't lost the basis that we grew up on. There have been some big successes in the

DTP-3275-23-7/26/2005

last four years, but most of that came from something that went on before that period. Both cyclically and every other way, you don't find a lot of shining lights out there in a period of restructuring, refocusing, reevaluating and downsizing. It's tough.

#### Interviewer

You may not know for another four years exactly what those are. Maybe I should ask you that question in four years.

### GHW

It's obvious that there isn't one shining light. I thought that maybe something would turn on. I see a reasonably good path out there to the future and I feel good about that. But that's a whole lot of things that I think we're getting a hold of and have things going on. I find it very stimulating to go around and in some of these plants that we started from scratch and find high-quality management and high-quality performance that's being generated in an atmosphere of teamwork. That's really fun. Certainly, there are dimensions of that in the oriented strand Board plants. There are plants that aren't making any money today, but are really performing well-in newsprint and in Columbus. My satisfaction is that they were conceived and built from scratch, manned from scratch, trained from scratch and they're well-led and there are positive atmospheres. So you say to yourself, "If you can do it in a number of different product lines and have it come out that well, then somebody is doing something fundamentally right." It gives me hope that we'll be able to replicate at higher speed as we redo some of these older plants. It's harder to do in bigger, older plants because of the people equations, the habits, and the ages. I think it's good to have younger people and younger outlooks leading these things all the way up to the top. We've got guys in their 30s who are really into leadership and I say guys because there aren't too many gals out there, unfortunately. There will be more.

#### Interviewer

Thank you.