

I see you use in the chart the present trend as a rather constant line, and you guide your program either above or below it. Assuming that that line is accurate, address yourself, if you will for my better understanding, to the validity of the present line, the current trend level. Now, because you use the word "depress," the minute you drop below that line, I believe you used the word "depress," is that line totally accurate, based upon our present measurement of inventory and thinning and all the other factors that go into establishing the line? It seems to me that I need a little better understanding of why you are so willing to accept that line as the base upon all of your calculations of that accelerated program. Is it beyond question?

Dr. GRAVES. No, I would not consider it beyond question. It is based primarily upon the growth potential that has been the experience of foresters to date in dealing with the stands under their care, and as such is primarily a representation of the amount of growth that can be expected from wild, largely unmanaged stands. For example, the average growth projection on an average acre of Douglas-fir timber is 500 board feet per acre. This is fairly close to that produced under wild, unmanaged conditions. Under reasonably intensive management care, this productivity can be increased by approximately 50 percent, others considerably more than that. So that as we advance into more productive younger growth, where we are capturing the growth that is now lost through mortality in these overage stands, this line can be tilted upward slightly. Much depends upon the efficiency of management that we are able to employ.

This line was used merely as a reference point, because it is what was projected with the use of the resource including this inventory as part of the base, this is a part of the reserve that has been kept in the bank to draw upon while the younger stands would presumably get up to this point.

Senator HATFIELD. The minute you drop below that line, would you restate for me again the language you used relating to the word "depressed?" If you accept that as a point of reference, what was it that you said happens if you drop below that line?

Dr. GRAVES. Following the trend of this line here?

Senator HATFIELD. Yes, that one.

Dr. GRAVES. What this line indicates is the existence of a possibility of harvesting the full amount of overage material that is considered excessive to optimum productivity at a point in the future, and actually captures considerably more volume that would ultimately be lost through mortality, but in doing so, may cut, and this is a matter of judgment, may cut unduly into reserve, since we have an imbalance of age classes in the younger ages, may cut unduly into reserve that is needed to sustain productivity during this period of—

Senator HATFIELD. Of 30 years.

Dr. GRAVES (continuing). Of 30 years that dips below the so-called median line here. Now, this touches upon the relatively accepted concept of even flow. In other words, to maintain economic and community activities in a region at a given level.

Senator HATFIELD. But you are dealing, though, with a fully realized timber growth cycle. You are dealing with a crop that is ready for harvest in that amount of timber that you would put in that cutting program that falls below the present current—