

ESTIMATED DISTRIBUTION BY DRAFT OF VESSEL TRIPS CARRYING WOOD PULP FROM HUMBOLDT HARBOR, 1970-2020 (INBOUND AND OUTBOUND)

Vessel draft (feet)	1970	1980	1990	2000	2010	2020
20 or less.....	15	23	24	25	26	28
28.....	5	8	8	8	8	9
29.....	5	8	8	8	9	9
30.....	3	4	5	5	5	6
31.....	2	3	3	4	4	4
Total.....	30	46	48	50	52	56

Mr. CLAUSEN. I might add if the gentleman will yield, the depth of the channel will pretty well determine the size of the ships that will be able to use that facility. Quite frankly, the state of the art suggests that if we had the ability to increase the benefits under this established benefit-cost ratio, the chances are we would actually increase the depth hopefully to accommodate a larger ship. But under the circumstances, all things being equal, this appears to be all we can accomplish for the moment as I see it.

General NOBLE. Sir, in predictions for the future, it is going to be influenced by what happens after this project is built. All we can consider are what we know exists today and what we are reasonably assured is going to exist when we get this project in. Beyond that, we do not prejudge the possibilities. These possibilities of course are infinite and in a few years after this project is built, assurances can be received on additional industry moving in and causing more traffic, and that could cause a project to become obsolete very rapidly. If growth occurs as predicted, this project will be adequate for the full project life of 50 years or longer.

Mr. HARSHA. How do you arrive at future predictions, like future requirements?

General NOBLE. We recommend investment of Federal funds only on predictions with a substantive basis, and don't attempt to satisfy all the various infinite possibilities which are more speculative in nature in calculating the benefit-cost ratio.

Mr. CLAUSEN. There is one thing that I would like to mention, because I would believe that the gentleman from Ohio is familiar with what I am going to say; and that was during the 1964 flood all the projects in and out of the area, including the railroad, as he recalls, were actually destroyed so as to completely isolate the area from the standpoint of railroad and truck transportation. This meant that this harbor facility and the airport itself were the only means of moving anything in the way of commerce and/or people out of the area.

It takes on increasing importance, not only for the immediate area, but the entire north coast of California.

Mr. HARSHA. You mentioned, Colonel, that an increment has a very narrow benefit-cost ratio. What did you mean by that?

Colonel PICK. Sir, the northern channel portion of this project has a very narrow benefit-cost ratio incrementally. It has 1.01 to 1 benefit-cost ratio. This was caused by the fact that the Gunther Island disposal area is a bird refuge, wildlife refuge area, and we are unable to use this area for dredge spoil disposal. We therefore had to enlarge the northern spit disposal area, the use of which greatly increased the