

NOTES ON PROPOSED CHANNEL DREDGING IN

COOS BAY

Shellfish Laboratory  
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On August 14, 1948 this laboratory was informed of an Army Engineer dredging project taking form in Coos Bay. In essence we were informed of the disposal areas for the dredge wastes and of the public's objection because of clam populations existing in those areas. A trip to that area on July 9, 1948 and other field trips to that region gave us a fair knowledge of the area in question. Concerned with the threatened waste of natural resources actual counts per unit area of the horseclams present were made on the flats where the wastes were to be dumped. The counts were normal, or slightly below, yielding 21.3 clams per thousand square feet (e.g., Yaquina Bay -- 25 clams per thousand square feet). Our attention was called to the dredging operations even then by one of the local commercial horseclam diggers who feared destruction of the clam beds.

A report to the Commission's office informed them of the damage that would be caused were the waste to be piled on top of the horseclam beds in that area, as the proposed dumpage area supported one of the main areas of commercial and sports digging for the horseclam in Coos Bay.

Efforts having failed to stop the dumping of wastes in that area the biologists of this station have since followed from time to time through the summer and winter of 1948 and the spring of 1949 the "progress" made by the Army Engineers in their project. The resulting damage from work done during the summer of 1948 was the covering of 700 by 150 yards of a 2000 by 150 yard clam bed, or approximately 35% of the clam bed in question.

The spoilage which consisted of rock and mud was piled approximately six feet deep over the lower (downbay) end of the clam bed. In a matter of several months silting action had placed a covering of four to six inches of silt over the majority of the remaining bed. The clams in places managed to keep their siphons above the silt and keep alive but in the immediate area many were killed. Another result has been an increase in intensity of digging by both sports and commercial diggers on other remaining small beds. Reducing the clam bed area but maintaining the same total intensity of dig takes the numbers of clams per unit area down considerably, with a depletion of the stocks as the probable end result.

An August 1949 survey of the remaining area in question showed the count of clams to be only 2.4 clams per thousand square feet, this being the combined result of increased intensity and silting action.

If the dredging action continues this fall and spoilage is allowed to be dumped under the original plan the heretofore partially covered clam bed will be completely covered and lost to clam productivity indefinitely. In the 1948 dredging the 700 by 150 yard spoils area removed from production an area supporting a normal population of 24,000 pounds of Empire clams based on the above figures and on a  $1\frac{1}{4}$  pound drained clam weight. Using the same figures it will be seen that a continuation of this project over the remaining area will mean an additional destruction of clam beds supporting a normal population of 44,000 pounds of clams. At a minimum commercial evaluation of 10¢ per pound to the digger this means a considerable loss per year, and if the sports value were considered the loss would be incalculable due to the destruction of a resource of which we are already short.

According to local reports offers of local residents owning frontage on the Empire side of the bay to let dredge waste be dumped on their property free of charge were turned down by officials of the project because "of the extra cost of piping the waste to that area".

The three proposed disposal areas on the Empire side of the bay around Fossil and Pigeon points would cause little or no damage to the clam stocks of Coos Bay because of the lack of clams in that area. There is no objection to using this area for the dumping of spoilage.

In short, spoils areas are available which will do no damage if utilized. Therefore, it is recommended that no more dredge material be dumped on the clam producing areas of Coos Bay.

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