

YAQUINA RIVER, OREG., FROM TOLEDO TO YAQUINA.

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LETTER

FROM

THE SECRETARY OF WAR,

TRANSMITTING,

WITH A LETTER FROM THE CHIEF OF ENGINEERS, REPORT ON PRELIMINARY EXAMINATION AND SURVEY OF YAQUINA RIVER, OREG., FROM TOLEDO TO YAQUINA, WITH REPORT UPON ANY PROPOSITION FOR COOPERATION BY LOCAL INTERESTS.

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FEBRUARY 7, 1912.—Referred to the Committee on Rivers and Harbors and ordered to be printed, with illustrations.

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WAR DEPARTMENT,  
*Washington, February 6, 1912.*

SIR: I have the honor to transmit herewith, a letter from the Chief of Engineers, United States Army, dated 5th instant, together with copies of reports from Maj. J. J. Morrow, Corps of Engineers, dated August 17, and December 27, 1911, with maps, on preliminary examination and survey, respectively, of Yaquina River, Oreg., from Toledo to Yaquina, including a report upon a proposition for cooperation by local interests, made in compliance with the provisions of the river and harbor act of February 27, 1911.

Very respectfully,

H. L. STIMSON,  
*Secretary of War.*

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

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WAR DEPARTMENT,  
OFFICE OF THE CHIEF OF ENGINEERS,  
*Washington, February 5, 1912.*

SIR: I have the honor to submit herewith, for transmission to Congress, reports dated August 17, and December 27, 1911, with maps, by Maj. J. J. Morrow, Corps of Engineers, on preliminary examination and survey, respectively, of Yaquina River, Oreg., from

Toledo to Yaquina, including a report upon a proposition for cooperation by local interests, prepared in pursuance of a call in the river and harbor act of February 27, 1911.

Yaquina River has previously been the subject of preliminary examination at the call of Congress, but has never been improved by the United States. The improvement desired is a channel in the river and in Depot Slough of similar depth to that across the bar at the bay entrance (12 feet at mean lower low water) so that vessels able to cross the bar may pass unobstructed up to Toledo, 9 miles above Yaquina, where the principal sawmills are located.

Sufficient depth already exists to above Oysterville, 2½ miles above Yaquina, and the district officer has prepared a plan for securing, mainly by dredging, a channel thence to a point just below the Fir & Spruce Lumber Co.'s dock at Toledo, 10 feet deep at mean lower low water, 200 feet wide on bottom in Depot Slough, and 150 feet wide in straight reaches and 200 feet on curves in the river, at an estimated first cost of \$72,000. Maintenance work is estimated to cost \$3,000 every two years if the dredge which the port of Toledo possesses remains available for use.

Improvement of the river has been commenced by the community interested organized under State law into a port district, which has available about \$44,000 to be applied directly to improvement in line with the above plan, making a contribution of about 60 per cent. The first cost of the work to the United States will therefore be about \$28,800.

In the opinion of the district officer it is advisable for the United States to undertake this improvement on a basis of a 60 per cent contribution by the port of Toledo, either in cash or in useful work performed, subject to the condition that the floating plant belonging to the port be made available for the work and for maintenance without cost to the United States other than for upkeep while in use. He further states that if the work is authorized during the present session of Congress an initial appropriation of \$10,000 would be sufficient, the balance to be provided in the next ensuing river and harbor act; otherwise the entire amount should be made available in a single appropriation.

These reports have been referred, as required by law, to the Board of Engineers for Rivers and Harbors, to whose accompanying report, dated January 16, 1912, attention is invited. The board, with the division engineer, concurs in the recommendation of the district officer.

After due consideration of the above-mentioned reports, I concur in general with the views of the district officer, the division engineer, and the Board of Engineers for Rivers and Harbors, and therefore, in carrying out the instructions of Congress, I report as follows: That the improvement by the United States of Yaquina River, Oreg., from Toledo to Yaquina, is deemed advisable so far as to secure an available channel depth of 10 feet at mean lower low water, 200 feet wide in Depot Slough, and 150 feet wide, increased to 200 feet on curves in the river, following in general the methods described in the report of the district officer, at an estimated cost of \$72,000 for first construction and \$3,000 biennially for maintenance, provided local interests contribute 60 per cent of the estimated first cost, either in cash or useful work performed, prior to actual construction

work by the United States, and that the floating plant belonging to the port of Toledo will remain available for use by the United States on work of construction and of maintenance without cost to the United States other than for upkeep while in use. These estimates are based on the supposition that the construction work will, as now seems desirable and advantageous, be prosecuted under a first appropriation at the present session of Congress of \$10,000, and a subsequent appropriation at the next session of \$18,800, or preferably that the full amount of the estimated cost to the United States will be made available in a single initial appropriation.

Very respectfully,

W. H. BIXBY,  
*Chief of Engineers, U. S. Army.*

The SECRETARY OF WAR.

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PRELIMINARY EXAMINATION OF YAQUINA RIVER, OREG., FROM  
TOLEDO TO YAQUINA.

UNITED STATES ENGINEER OFFICE, FIRST DISTRICT,  
*Portland, Oreg., August 17, 1911.*

SIR: In compliance with instructions contained in letter dated Office of the Chief of Engineers, Washington, April 7, 1911, assigning to this office the duty of making a preliminary examination of Yaquina River, Oreg., from Toledo to Yaquina, with report upon any proposition for cooperation by local interests, as authorized in the act of Congress approved February 27, 1911, I have the honor to make the following report:

The examination was made under direction of this office in May, 1911, by Mr. R. W. Williams, inspector. A public hearing was held at the office of the first Portland district on June 29, 1911, and representatives of various interests of the valley and a member of the port commission were present thereat.

PREVIOUS EXAMINATIONS.

The Yaquina River has been previously the subject of preliminary examinations, under provisions of former acts of Congress, and the reports on these examinations are printed in House Document No. 112, Fifty-fifth Congress, second session; House Document No. 240, Fifty-eighth Congress, second session; and House Document No. 351, Sixty-first Congress, second session. The first-mentioned document contains a map of the stretch of river which is the subject of this examination. As a result of all three examinations it was found and reported that the improvement desired was not worthy of being undertaken by the Federal Government.

GENERAL DESCRIPTION OF THE RIVER.

The Yaquina River is a small stream which takes its rise in the Coast Range of mountains in Lincoln County, Oreg., about 30 miles in a direct line from the Pacific Ocean. Twenty-one miles from its mouth it is joined by its principal tributary, Big Elk River, at the

small town of Elk City. The amount of fresh water carried by both streams is insignificant. The tidal influence extends about 5 miles above Elk City, which is as far as the stream may be considered navigable, and then only for skiffs and light-draft scows.

At Elk City the river is about 160 feet wide; between that point and the mouth of Depot slough, a distance of 9 miles, it gradually widens to about 800 feet. The controlling depth throughout this part of the river is about 3 feet at mean low tide, although many long stretches have depths of from 5 to 10 feet and even more at that stage.

Toledo is situated on Depot slough just above its junction with the river. From Toledo to Oysterville,  $6\frac{1}{2}$  miles downstream, the river varies in width from 800 to 1,200 feet, except at the first bend below Depot slough, where it is but 400 feet in width. The channel depths vary between 3 and 20 feet. Depths are in excess of 6 feet at low water except on five mud bars, the position, length, and depths of which are shown in tabulated form herewith.

	Distance below Toledo.	Length of bar.	Minimum depth at low water.
	Miles.	Miles.	Feet.
First bar.....	( <sup>1</sup> )	1000	3
Second bar.....	$1\frac{1}{2}$		5
Third bar.....	2		5
Fourth bar.....	$2\frac{1}{2}$		5
Fifth bar.....	$5\frac{1}{2}$		5

<sup>1</sup> At and below.

From Oysterville to Yaquina,  $2\frac{1}{2}$  miles, the channel has a minimum depth of 12 feet at low water, which depth prevails across Yaquina Bay and over the bar at the bay entrance. The town of Yaquina is about one-half mile above the head of the bay, which is about 3 miles long and about 1 mile wide.

To summarize, between Toledo and Yaquina, a distance of about 9 miles, the Yaquina River is a portion of a tidal estuary, with an average range of tide of about 6 feet and with a minimum depth of water of 4 feet at low tide, excepting at one long shoal immediately below Toledo, where there is but 3 feet depth.

#### RESOURCES AND DEVELOPMENT.

Yaquina is a small settlement and the terminus of the Corvallis & Eastern Railroad, which connects with the Southern Pacific system at Corvallis and Albany in the Willamette Valley. Toledo, the county seat, is on the railroad and has a population of about 800. Newport, near the bay entrance, has a population of about 600, but during the summer months is a resort of considerable size.

A narrow strip of bottom land borders the river and its tributary streams. Considerable clearing and settlement has occurred during recent years, but the valley has not as yet passed the sparsely settled stage.

There is a sawmill at Elk City and two at Toledo with a combined capacity of about 200,000 feet b. m. per day. There is a creamery at Toledo and a small salmon cannery at Oysterville.

The river and its tributary sloughs are used for logging purposes and by the farmers and others who own gasoline launches and small barges on which they transport wood, hay, and other products to market and bring back supplies. No record of this traffic is kept, but on account of the small population its amount and value can not be very great.

Two small gasoline seagoing boats make regular trips between Toledo and Portland, Oreg., carrying freight and passengers. No record has been kept, but it is stated that the yearly tonnage of merchandise, exclusive of lumber handled in this way, would not exceed 300 tons. About 12,000 tons of lumber are shipped out annually by water and a considerably larger tonnage by rail. Lumber will undoubtedly be the largest item of freight shipments, it being claimed that there are 12,000,000,000 feet of timber in the valley of the Siletz River, from 10 to 20 miles north of the Yaquina River, which should find an outlet to market by way of Depot and Olalla Sloughs. A logging road 4 miles long has already been built along Olalla Slough, and rights of way secured for another road along Depot Slough.

#### IMPROVEMENT DESIRED.

The improvement desired is the dredging of a channel through the various bars below Toledo to the deeper water in the bay and the construction of training dikes at a few places to concentrate the flow over the bars to obtain a channel of sufficient width and depth to allow small coasting schooners to load lumber at or near Toledo to a draft of about 15 feet at high tide.

To obtain this improvement the community is organized under State law into a port district, and has raised, by the issue of bonds, the sum of \$50,000, and, under a permit from the War Department, has already undertaken the improvement. The funds are being applied to the purchase of 600 feet of water front at Toledo for public wharves, to the construction of two training dikes for channel control, and to the construction of a clamshell dredge with a dipper of 1½ yards capacity. The cost of these items will leave a balance of about \$20,000, which the port proposes to use in the operation of the dredge on the various shoals. They desire that the Federal Government assist in the work by completing the work after the exhaustion of their funds, and enlarging the channels obtained in their work, and express a willingness to cooperate by loan or rental of their dredge, or upon any terms that may be reasonable.

There are no considerations in respect to terminal facilities, water power, or other collateral subjects that have any bearing on the scope of this examination, except as mentioned hereinbefore.

#### *Conclusions and recommendations.*

In view of the fact that the local interests have shown their confidence in the value of the improvement desired by entering upon the work, and have expressed their willingness to cooperate with the Federal Government upon any reasonable basis to secure its completion or extension, I am of opinion that a survey of the river

should be made to determine the cost of the improvement desired. The necessary survey can be made for the sum of \$900, and is recommended.

Respectfully submitted.

JAY J. MORROW,  
*Major, Corps of Engineers.*

The CHIEF OF ENGINEERS, UNITED STATES ARMY.  
(Through the Division Engineer).

[First indorsement.]

UNITED STATES ENGINEER OFFICE,  
NORTHERN PACIFIC DIVISION,  
*San Francisco, Cal., August 21, 1911.*

Respectfully forwarded to the Chief of Engineers, United States Army, concurring in the views expressed by the district officer.

THOS. H. REES,  
*Lieut. Col., Corps of Engineers,  
Division Engineer.*

[Third indorsement.]

THE BOARD OF ENGINEERS FOR RIVERS AND HARBORS,  
*Washington, September 5, 1911.*

Respectfully returned to the Chief of Engineers, United States Army.

This examination is called for with a view to the improvement of the Yaquina River from Toledo to Yaquina in connection with local cooperation. The entrance to Yaquina Bay has been improved under a project adopted in 1880, which with subsequent modifications, provided for the construction of two jetties and the removal of a cluster of rocks beyond the end of the jetties. Under these projects there has been expended somewhat in excess of \$700,000 and the work successfully completed, resulting in a channel 13 to 15 feet in depth at mean low tide, 21 to 22 feet at high tide. As no commerce resulted from this improvement, work was completely discontinued about 1905, since which time nothing has been done by the General Government.

The village of Yaquina is situated about one-half mile above the head of the bay, 4 miles above the bar at the entrance. Toledo is about 9 miles above Yaquina. On this portion of the river the minimum depth of water at low tide is 4 feet, excepting on one shoal immediately below Toledo, where there is but 3 feet. The range of tide is about 6 feet.

The improvement desired is an increase in channel depth over this reach sufficient to allow small coasting steamers to load lumber at or near Toledo to a draft of about 15 feet at high tide. The country tributary is sparsely settled, and there is very little commerce at the present time. There is a large potential commerce in lumber, and the purpose of the improvement is to permit this commodity to be marketed by water. To secure this improvement the community has been organized under State law into a port district, has raised by issue of bonds the sum of \$50,000, and is now engaged under a permit from the Secretary of War in carrying on the work. The community desires that the United States take up the work after the

exhaustion of their funds and complete the project, with such further local cooperation as may appear reasonable.

In view of the faith shown by the community in the success of the project by the expenditure of their own funds, and the fact that Congress has called for consideration of local cooperation, the board concurs with the district officer and the division engineer in recommending that a survey be authorized in order to determine the cost of improvement, and to secure full information upon physical and commercial conditions and the further cooperation proposed by the community, as the advisability of the United States entering upon the work is dependent upon these questions.

For the board:

S. W. ROESSLER,  
*Colonel, Corps of Engineers,  
Senior Member Present.*

[Fourth indorsement.]

WAR DEPARTMENT,  
OFFICE OF THE CHIEF OF ENGINEERS,  
*Washington, September 12, 1911.*

Respectfully submitted to the Secretary of War.

This is a report on preliminary examination of Yaquina River, Oreg., from Toledo to Yaquina, authorized by the river and harbor act of February 27, 1911.

Inviting attention to the report of the Board of Engineers for Rivers and Harbors in the preceding indorsement, I recommend that a survey of the locality, as proposed, be authorized.

H. TAYLOR,  
*Acting Chief of Engineers.*

[Fifth indorsement.]

WAR DEPARTMENT,  
*September 13, 1911.*

Approved as recommended by the Acting Chief of Engineers.

ROBERT SHAW OLIVER,  
*Acting Secretary of War.*

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## SURVEY OF YAQUINA RIVER, OREG., FROM TOLEDO TO YAQUINA.

UNITED STATES ENGINEER OFFICE, FIRST DISTRICT,  
*Portland, Oreg., December 27, 1911.*

SIR: I have the honor to submit the following report on the survey of the Yaquina River, Oreg., from Toledo to Yaquina, made under the provisions of the river and harbor act of February 27, 1911.

The preliminary report was submitted August 17, 1911; the survey was authorized by the Secretary of War September 13, 1911, and was completed in October, 1911. The field work was in local charge of Mr. James E. Kelley, with Mr. James S. Polhemus, assistant engineer, in general charge. The survey extended from Toledo to Oysterville, a distance of about 6½ miles, as this portion of the river contained all existing obstructions to prospective navigation, the depth below Oysterville being ample for all traffic that can enter the bay.

A description of the locality, of its resources, and of the history of previous examinations is given in the preliminary report. To this description nothing has been developed that is necessary to be added excepting a statement of the commerce handled on the river during the year 1911, which is as follows:

Lumber.....	feet B. M..	3, 000, 000
Piles.....	linear feet..	10, 000
Cordwood and slab wood.....	cords..	400
Merchandise.....	tons..	1, 200
Fruit and vegetables.....	do....	50
Miscellaneous.....	do....	25

#### METHODS AND RESULTS OF THE SURVEY.

The survey was made in October, 1911, by Mr. James E. Kelley, inspector. A transit line, on true bearings was run along the bank of the river, the necessary topography being taken with the stadia and soundings located by tag line. On the various shoals the bottom was probed to ascertain the proximity of bed rock. The tidal plane of reference, mean lower low water, was obtained by setting a gauge referred to the mean height of several low waters, as given by the tide tables of the Pacific coast.

A map of the work has been prepared on a scale of 1 to 4,000, in two sheets, which is forwarded herewith.

The survey shows a narrow channel in Depot Slough with low-water depths ranging from 6 to 15 feet. Below the mouth of Depot Slough a shoal occurs to Mackays Point on which the controlling low-water depth is about  $4\frac{1}{2}$  feet. Going down the river, from opposite Bockman's place to a point a short distance below Hansens, the controlling low-water depth is about  $6\frac{1}{2}$  feet. There is a very short shoal below with a low-water depth of  $8\frac{1}{2}$  feet, and a last one opposite McIntyre's wharf with a controlling low-water depth of  $7\frac{1}{2}$  feet. Below this point the depths are sufficient for any vessel that can cross the ocean bar, as can be seen by reference to the Coast and Geodetic Survey chart of Yaquina Bay. The bottom appears to be mud and silt, and the investigations did not indicate that any difficulty from rock bottom would be encountered in dredging to 10 feet below mean lower low tide.

The two dikes built last spring are shown on the map. They do not appear to have been long enough in place to have had any effect on the channel depths.

#### IMPROVEMENT DESIRED BY THE LOCALITY.

The citizens of the locality have organized into a port district under the State law, and desire to have the channel of the Yaquina River and Depot Slough so improved that vessels which can cross the bar at the entrance to the bay can pass unobstructed up to Toledo, where the principal sawmills are located, and from which point it is expected to ship much of the lumber manufactured from the standing timber of the Siletz watershed. Fifty thousand dollars have been realized by the sale of bonds of the port of Toledo, and work has been commenced and is in progress under a permit from the Secretary of War. Up to the present time the port has expended a portion of the funds (about \$30,000) in purchasing about 600 feet of water front at Toledo



for a public dock, the building of two half-tide pile and brush training dikes in the Yaquina River, and in the construction of a bucket dredge of 1½ cubic yards dipper capacity. The dredge cost about \$16,000, and appears to be an efficient machine of its kind, capable of removing from 800 to 900 cubic yards per day. It has just been started at work on the shoal at the mouth of Depot Slough.

About 12 feet at mean lower low water is a fair average of the controlling depth on the Yaquina Bar, with a mean rise of tide above this plane of about 7.2 feet, so that vessels loaded to about 14 feet ought to be able to navigate the bar safely at high water, and if the low water controlling depth to Toledo is made 10 feet, should be able to pass on up the bay and river to that point without difficulty at high tide.

The estimate has been prepared for dredging a channel through the various shoals to a depth of 10 feet at mean lower low water, and with a bottom width of 150 feet in straight reaches and 200 feet on the curves, from the deep water above Oysterville to a point just below the Fir & Spruce Lumber Co.'s dock in Toledo.

The port of Toledo has built the dikes authorized by their permit, and is operating the dredge within the lines of the project covered by the following estimate. The dredge has a 95-foot boom, and it is proposed to deposit a considerable portion of the spoil to one side of the cut where the latter lies close to shoals or to the shore. Two small side dump scows of a capacity of about 100 cubic yards each would seem to be suitable for transporting such portions of the spoil as would require it to points where it would not likely be returned to the channel. Their cost, about \$2,000 each, is included in the unit price for excavation, 10 cents per yard, and can be covered, judging from actual costs of the work already done. It is estimated that with this plant about two years will be required to do the work.

The estimate is herewith:

Building of two pile and brush dikes (already constructed) about.....	\$8, 500
Purchase of bucket dredge and equipment, about.....	16, 000
Dredging a channel about 200 feet wide and 10 feet deep at mean lower low water in Depot Slough, from Toledo to its mouth, 131,400 cubic yards excavation, at 10 cents.....	13, 140
Dredging a channel from 150 feet to 200 feet wide and 10 feet deep at mean lower low water from the mouth of Depot Slough to a point just above Oysterville, 270,000 cubic yards of excavation, at 10 cents.....	27, 000
Engineering, superintendence, and contingencies.....	7, 360
<b>Total.....</b>	<b>72, 000</b>

It is further estimated that an expenditure of about \$3,000 every two years will be required for maintenance, provided the small dredge which the port possesses will remain available for use, as is probable.

The port has available for this work, including the accomplished work, about \$44,000, the remainder of their fund of \$50,000 having been expended or pledged for work not included in this estimate. This sum is, roughly, 60 per cent of the estimated cost. The port desires the United States to complete the work by taking over, free of rental, their plant and executing the remainder of the work in part from the funds of the port from the time of the adoption of the project. They have made this proposal in writing, a copy of their letter being forwarded herewith.

CONCLUSIONS AND RECOMMENDATIONS.

The proposition made by the port of Toledo resolves itself into a request that the United States take up and complete a project in which they have shown their faith by providing for about 60 per cent of the work. Or, stated in another way, they are providing the necessary plant and executing about half the work, requesting the United States to execute the other half with only such cooperation on their part as is involved in allowing the free use of a suitable plant, the first cost of which does not differ greatly from the estimated total expense to the United States.

Although the country is sparsely settled and though the present commerce is small, I am of opinion that the completion of the work herein outlined will cause a considerable increase in the water-borne lumber business, and that the project is worthy of being undertaken by the Federal Government on the basis of a 60 per cent contribution by the port of Toledo, either in cash or in useful work performed, subject to the condition that floating plant belonging to the port be available for the work and for maintenance, without cost to the United States other than for upkeep while in use.

The total cost of the improvement to the United States, viz, \$28,800, should be provided for use within two years. As the port of Toledo has accomplished part of the work and will continue it until the exhaustion of their funds, it will not be necessary for Congress to appropriate more than \$10,000 should the project be adopted during the present session, the remainder to be appropriated during the final session. Should the project, however, not be adopted until the final session of the existing Congress, the entire sum will be required.

There are no considerations in respect to terminal facilities, water power, or other collateral subjects that are germane to the examination and survey, except as briefly outlined in the report on the preliminary examination.

Respectfully submitted.

JAY J. MORROW,  
*Major, Corps of Engineers.*

The CHIEF OF ENGINEERS, UNITED STATES ARMY.  
(Through the Division Engineer).

[First indorsement.]

UNITED STATES ENGINEER OFFICE,  
NORTHERN PACIFIC DIVISION,  
*San Francisco, Cal., December 30, 1911.*

Respectfully forwarded to the Chief of Engineers, United States Army, concurring in the views expressed by the district officer.

THOS. H. REES,  
*Lieut. Col., Corps of Engineers,*  
*Division Engineer.*

[Third Indorsement.]

THE BOARD OF ENGINEERS FOR RIVERS AND HARBORS,  
*Washington, January 16, 1912.*

Respectfully returned to the Chief of Engineers, United States Army.

A survey of Yaquina River having been made, the district officer submits a project for dredging through the various shoals to a depth of 10 feet at mean lower low water, with a bottom width of 150 feet in straight reaches and 200 feet on the curves, from the deep water above Oysterville to a point just below the Fir & Spruce Lumber Co.'s dock in Depot Slough at Toledo. The estimate is as follows:

Building 2 pile and brush dikes (already constructed), about .....	\$8,500
Purchase of bucket dredge and equipment, about.....	18,000
Dredging .....	40,140
Engineering, superintendence and contingencies.....	7,360
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Total.....	72,000

It appears that under a permit from the Secretary of War, the improvement of the river, in substantial accord with the above project, has been commenced by the port of Toledo and is now in progress. Up to the present time the port has expended about \$30,000 in purchasing a frontage at Toledo for a public dock, building the two dikes in the Yaquina River, and constructing a bucket dredge, which has just been started at work. The port desires the United States to complete the work by taking over their plant free of rental and executing the remainder of the work, in part from the funds of the port, from the time of the adoption of the project. Of the \$50,000 originally raised by the port it is proposed to apply about \$44,000 directly to improvement in line with the above estimate, making a contribution of about 60 per cent. The cost of the work to the United States will be about \$28,800. The district officer estimates that an expenditure of about \$3,000 every two years will be required for maintenance, provided the small dredge which the port possesses will remain available for use..

Although the country is sparsely settled and the present commerce is small, the district officer is of opinion that the completion of the work outlined will cause a considerable increase in the water-borne lumber business and that it is advisable for the Federal Government to undertake the improvement on the basis of a 60 per cent contribution by the port of Toledo, either in cash or in useful work performed, subject to the condition that the floating plant belonging to the port be available for the work and for maintenance, without cost to the United States other than for upkeep while in use. After consideration of the information presented, the board joins the division engineer in concurring in the opinion that it is advisable for the United States to undertake the improvement under the conditions specified by the district officer. If the work is authorized during the present session of Congress, an initial appropriation of \$10,000 is recommended, the balance to be provided in the next ensuing river and harbor appropriation act. Otherwise the entire amount should be made available in a single appropriation.

In compliance with law, the board reports that there are no questions of water power involved in this investigation, and, except as proposed above, there are no questions of terminal facilities or other

related subjects which could be advantageously coordinated with the recommended improvement to lessen the cost and compensate the Government for expenditures made in the interests of navigation.

For the board.

W. C. LANGFITT,  
*Lieut. Col., Corps of Engineers,*  
*Senior Member Present.*

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LETTER OF PORT OF TOLEDO.

TOLEDO, OREG., *December 20, 1911.*

SIR: I have the honor to submit to you the following proposition on behalf of the commission of port of Toledo for the projected improvement of Depot Slough and the Yaquina River from the Fir & Spruce Mill Co. wharf at Toledo, Oreg., to Oysterville.

We will bear 60 per cent of the cost of such improvement based upon the plans and estimates made by your department and will furnish the use of our dredging plant now in operation on said project free of cost to the United States. Providing that the port of Toledo be given credit for the expenditures made by it upon the project up to the time the project is assumed by the United States Government as shown by our vouchers therefor.

Respectfully submitted

Maj. J. J. MORROW,  
*Corps of Engineers.*

THE PORT OF TOLEDO.  
J. F. STEWART, *Vice president.*

