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AN INVENTORY OF FILLED LANDS

IN THE

CHETCO RIVER

November 1972

ADVISORY COMMITTEE TO THE STATE LAND BOARD

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Mr. Cecil L. Edwards, Executive Assistant

Prepared by the Advisory Committee's  
Engineering Staff under the  
direction of

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Staff Engineer  
Oregon Division of State Lands

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the State Land Board and a grant from the U.S.  
Department of Labor's Emergency Employment Act of 1971

The Chetco River subbasin covers an area of 719 square miles within the limits of Curry County. However, only 359 square miles of this area are drained by the Chetco River. The remaining 360 square miles are drained by the Winchuck River, Pistol River and Hunter Creek.<sup>1/</sup> These three small streams empty into minor estuaries before discharging into the Pacific Ocean.

The Chetco River is located in the extreme southwest corner of Oregon and discharges directly into the Pacific Ocean at Brookings, Oregon approximately five miles north of the California border. The estuarine portion of the river has a total area of 100 acres<sup>2/</sup> of which 55 acres are tidelands.<sup>3/</sup> The remaining 45 acres are permanently submerged land. Approximately 51 acres have been deeded to private owners by the State Land Board.<sup>4/</sup> The river has a navigable length of 8.5 miles and the head of tidewater has been established at 1.5 miles above U.S. Highway 101 bridge.<sup>5/</sup>

The Chetco River offers excellent opportunities for both commercial and recreational fishing with abundant chinook salmon, silver salmon, steelhead trout, cutthroat trout, bass and shad fishing. Crab and shrimp fishing is also excellent in this area. At the present time, there is no railroad in Curry County and the Port is too shallow for large ocean-going ships. Therefore, industry has faced somewhat limited development in this area.

The purpose of this study was to determine the location, ownership history, owner of record and use of filled land in the Chetco River Estuary. Filled lands or "new land" and related terms are defined by Oregon Statute Law which in many cases paraphrases English Common Law. A few of the more important definitions pertaining to filled land are shown below.

274.905 Definitions for ORS 274.905 to 274.940.

As used in ORS 274.905 to 274.940, unless the context requires otherwise:

(1) "New lands" means those lands, as distinguished from bridges, wharves, quays and similar structures, protruding above the line of ordinary high water, whether or not connected with the adjoining or opposite upland or riparian lands on the same side of the thread of the stream, which have been created upon submersible or submerged lands by artificial fill or deposit.

(2) "Public body" means the State of Oregon or any port organized under the laws of this state or any dock commission of any city of this state.

ORS 274.005. (7) "Submerged lands," except as provided in ORS 274.705, means lands lying below the line of ordinary low water of all navigable waters within the boundaries of this state as heretofore established, whether such waters are tidal or nontidal.

(8) "Submersible lands," except as provided in ORS 274.705, means lands lying between the line of ordinary high water and the line of ordinary low water of all navigable waters and all islands, shore lands or other such lands held by or granted to this state by virtue of her sovereignty, wherever applicable, within the boundaries of this state as heretofore or hereafter established, whether such waters or lands are tidal or nontidal.

Selected terms pertaining to tidelands and tidal boundaries are defined in Appendix A.

A brief summary of the procedure used to obtain information about the landfills in Chetco River is shown below:

- 1) Obtain copies of all U.S. Army Corps of Engineers (U.S.C.E.) permits for landfills or related projects in study area. Compile and tabulate data.
- 2) Obtain aerial photographs covering entire study area from U.S. Army Corps of Engineers, U.S. Forest Service, Oregon State Highway Dept., and other agencies.
- 3) Prepare a comparison overlay showing earliest and latest shorelines. Tentatively locate landfills on overlay using permit data, aerial photographs, and large changes in shoreline as shown by the overlay. The list of charts used is shown at the end of this report.
- 4) Visit estuary to verify location of landfills. Document size, location, and use of fills.
- 5) Visit County Courthouse to obtain ownership and assessment data if available.
- 6) Compile and complete report.

Information collected during this study which pertains to landfill ownership has been summarized in Table I. Detailed sketches of each landfill are shown in Appendix B, and a plate showing the location and relative size of each landfill is located at the end of this text. (The shaded areas on the sketch and plate denote landfills.)

Table I shows ownership and location data. Each landfill has been designated by a two part number -- the first part being an arbitrary number assigned during this study and the second part being the Curry County Tax Lot number. In addition to ownership and location, this Table lists the area of the fill and indicates whether a Corps of Engineers' permit was issued.

The relative size and location of each fill discussed in Table I are shown on Plate I at the back of this report. In addition, detailed drawings of each landfill parcel and a brief summary of pertinent data concerning the fill appears in Appendix B.

- 
- 1/ Oregon State Water Resources Board
  - 2/ Crisis in Oregon Estuaries
  - 3/ Crisis in Oregon Estuaries (U.S.C. and G.S. charts)  
(area between M.L.L.W. and M.H.H.W.)
  - 4/ Total acreage deeded to private owners by State  
Land Board
  - 5/ U.S. Army Corps of Engineers

## SUMMARY

There are 5.10 acres of landfill on submerged and submersible lands in the Chetco River Estuary. Approximately 1.13 acres are located on state-owned submerged land -- the remaining 3.97 acres are on privately-owned submersible land.

The majority of these fills have been constructed within the past six years. The primary purpose for filling was to create better docking facilities for recreational and commercial boats (fishing and sports-craft).

We wish to take this opportunity to thank all the agencies which provided portions of the necessary information enabling the completion of this report. In particular, we wish to extend our gratitude to the following agencies:

U.S. Army Corps of Engineers, Portland District  
Oregon State Water Resources Board  
Oregon Division of State Lands  
Curry County Assessor  
Port of Brookings

# APPENDIX A

DEFINITIONS OF TERMS PERTAINING TO  
TIDELANDS AND TIDAL BOUNDARIES

Definitions Used by  
U. S. Coast and Geodetic Survey  
from  
Shore and Sea Boundaries  
by  
Aaron L. Shalowitz

- Mean Higher High Tide. - Same as Mean Higher High Water.
- Mean Higher-High-Tide line. - Same as Mean Higher-High-Water line.
- Mean Higher High Water. - The average height of the higher high waters over a 19-year period. See Higher High Water, Nineteen-year Tidal Cycle.
- Mean Higher High Water Line. - The intersection of the tidal plane of mean higher high water with the shore. See Mean Higher High Water.
- Mean High Tide. - Same as Mean High Water.
- Mean High Water. - The average height of the high waters over a 19-year period. All high waters are included in the average where the tide is either semidiurnal or mixed. Where the type of tide is predominantly diurnal, only the higher high-water heights are included in the average on those days when the tide is semidiurnal. See mixed tides, semidiurnal tides, diurnal tides, Nineteen-year Tidal Cycle.
- Mean High-Water Line. - The intersection of the tidal plane of mean high water with the shore.
- Mean High-Water Mark. - Same as Mean High-Water Line.
- Mean Lower Low Water. - The average height of the lower low waters over a 19-year period. The tidal plane used on the Pacific Coast as a datum for soundings on the hydrographic surveys and nautical charts of the Coast and Geodetic Survey.

Mean Low Water. - The average height of the low waters over a 19-year period. All low water heights are included in the average where the type of tide is either semi-diurnal or mixed. Where the type of tide is predominantly diurnal, only the lower low water heights are included in the average on those days when the tide becomes semidiurnal.

Mean Low-Water Line. - The intersection of the tidal plane of mean low water with the shore.

Mean Sea Level. - The average height of the surface of the sea for all stages of the tide over a 19-year period, usually determined from hourly height readings. A determination of mean sea level that has been adopted as a standard for heights is called a sea level datum.

Mean Tide Level. - Same as Half-tide Level. A tidal datum midway between Mean High Water and Mean Low Water.

Ordinary High Water. - A nontechnical term considered by the Coast and Geodetic Survey to be the same as the tidal plane of mean high water.

Ordinary Low Water. - A nontechnical term considered by the Coast and Geodetic Survey to be the same as the tidal plane of mean low water.

Diurnal Tide. - Tides having a period or cycle of approximately one tidal day. Such tides exhibit only one high and one low water during a tidal day; the predominant type of tide in the Gulf of Mexico.

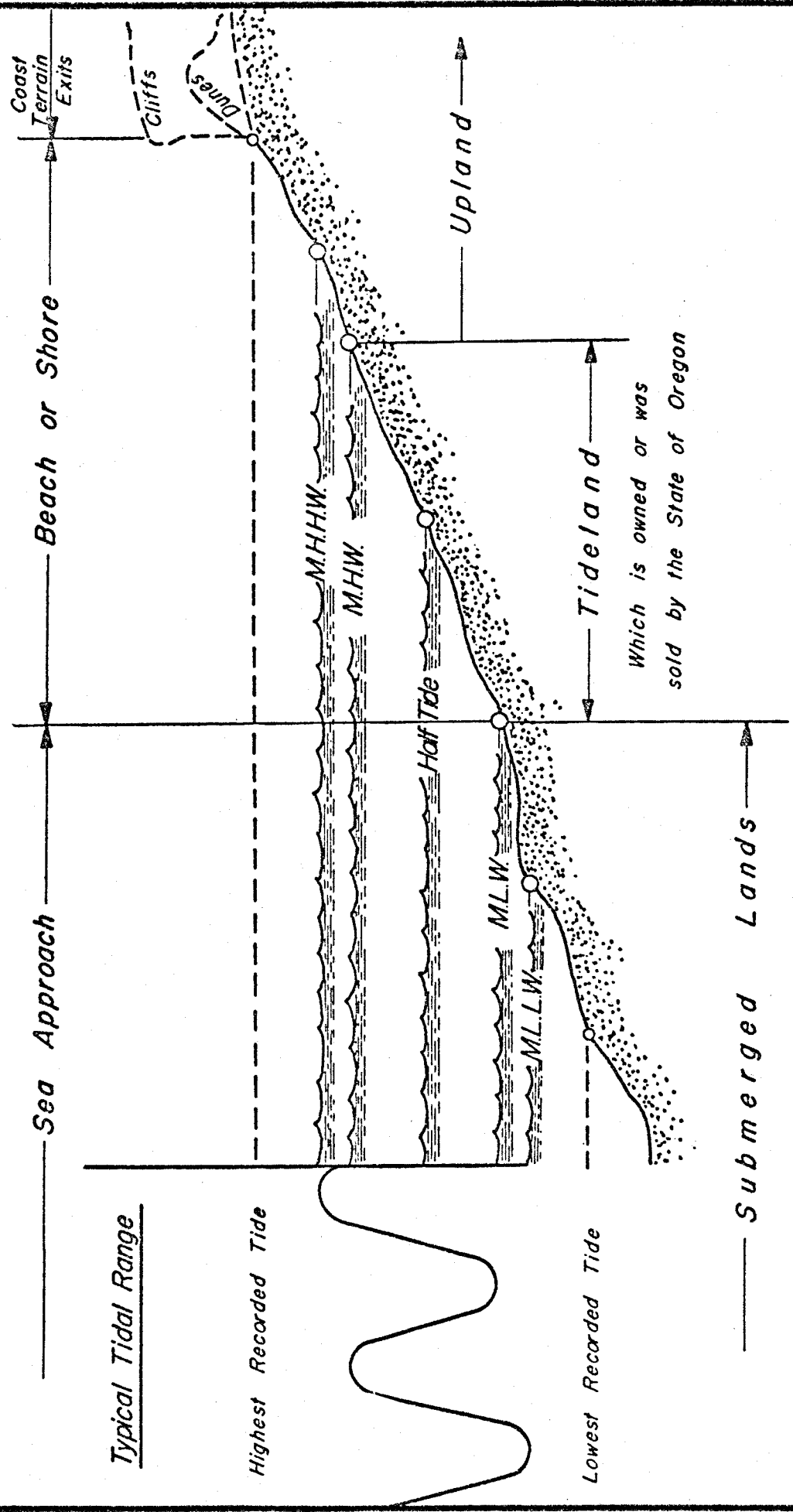
Semidiurnal Tides. - Tides having a period of approximately one-half a tidal day; the type of tide that is predominant throughout the world, with two high waters and two low waters each tidal day. Tides along the Atlantic Coast are of this type.

Mixed Tides. - Tides in which the presence of a diurnal wave is conspicuous by a large inequality in either the high or low-water heights, or in both, with two high waters and two low waters occurring each tidal day. Tides along the California (and Oregon) Coast are of the mixed type.

Tidelands. - The land that is covered and uncovered by the daily rise and fall of the tide. More specifically, it is the zone between the mean high-water line and the mean low-water line along a coast, and is commonly known as the "shore" or "beach." Referred to in legal decisions as between ordinary high-water mark and ordinary low-water mark. Tidelands presuppose a high-water line as the upper boundary.



# General Shore Profile Relationship to Tidal Range



Maps and Charts Used in This Study

Curry County Assessor's Maps  
Department of Revenue Forest Cover Maps  
United States Department of the Interior Geological  
Survey (Cape Ferrelo Quadrangle)

U.S. Army Corps of Engineers' Aerial Photos

1939	1962
1956	1965

Oregon State Highway Department Aerial Photos

1971

Oregon Division of State Lands Aerial Photos

1972

Chetco River (T4S-R13W)

Total Area: 100 acres  
Tidelands: 55 acres  
Tidelands Sold: 51 acres  
Navigable Length: 8.5 miles  
Tidewater: 1.5 miles above U.S. 101 Bridge

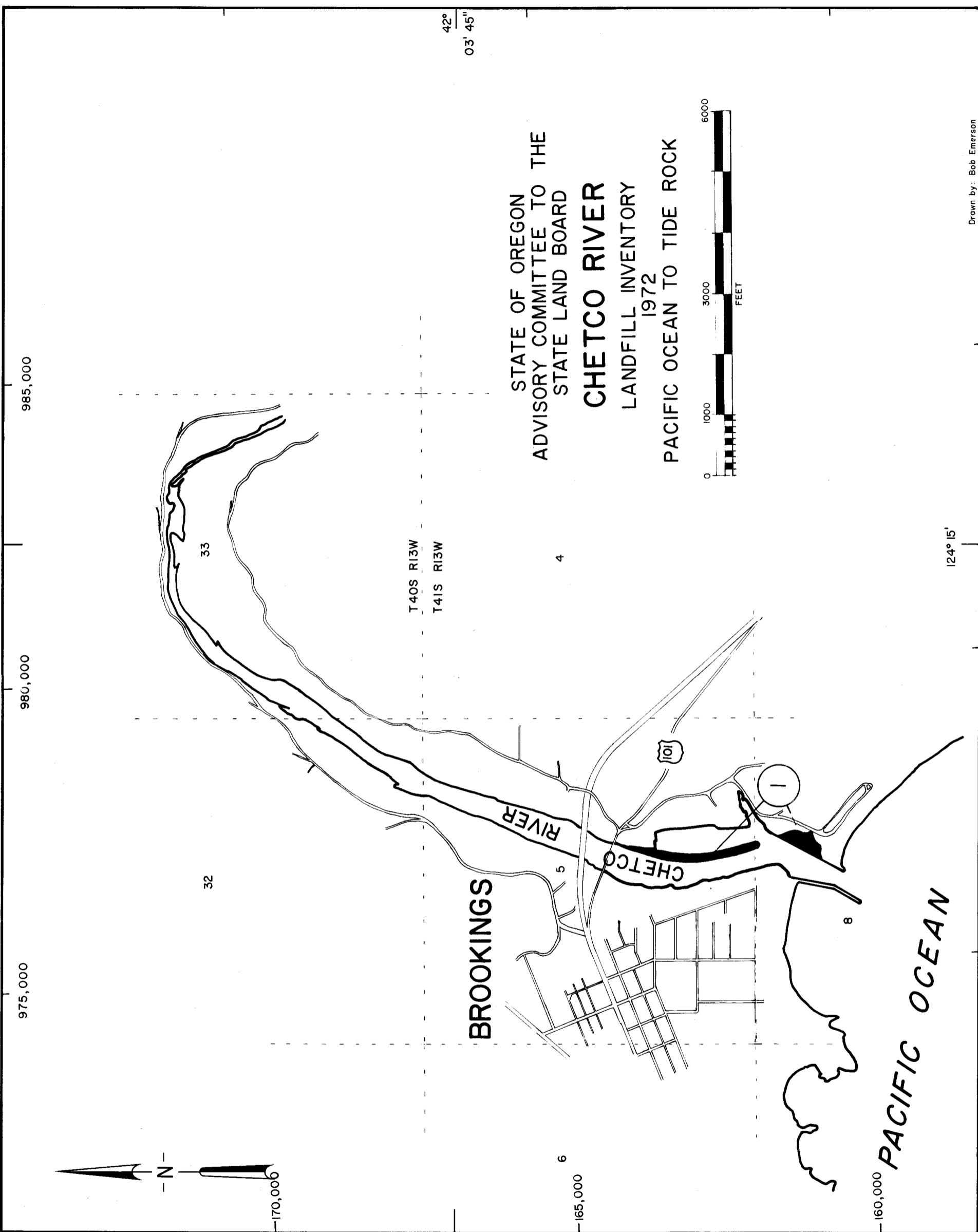
Tide Data

Brookings

<u>Stage</u>	<u>M.L.L.W.</u>	<u>M.S.L.</u>
M.H.W.	+6.3	+2.65
M.L.W.	+1.2	-2.45
M.L.L.W.	0.0	-3.65

Port District: Port of Brookings

APPENDIX B  
SKETCH PLATES OF LANDFILL PARCELS



STATE OF OREGON  
ADVISORY COMMITTEE TO THE  
STATE LAND BOARD  
**CHETCO RIVER**  
LANDFILL INVENTORY  
1972  
PACIFIC OCEAN TO TIDE ROCK

T40S R13W  
T41S R13W

Drawn by: Bob Emerson

42°  
03' 45"

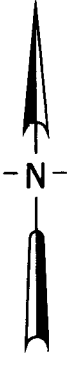
124° 15'

T41S R13W SEC. 5 & 8

# CHESTCO RIVER

MHW

MLW



00 | 07

EBB ←  
→ FLOOD

101

200

317

202

201

303

203

316

312

308

COUNTY ROAD 1-9

101

--- DENOTES MLW PRIOR TO DREDGING.

..... TOTAL FILLED AREA: 5.10 AC.  
SUBMERSIBLE: 3.97 AC.  
SUBMERGED: 1.13 AC.

Parcel #1 Tax Lots 101, 200, 201, 203, 312, 317 & 308  
Owners: 101 Curry County c/o Port of Brookings  
200, 201, 203, 312, 317, 308 Port of Brookings  
Construction Dates: 1968 to 1971  
Construction for use: Marina and Parking Lot

TABLE I  
OWNERSHIP AND LANDFILL DATA  
CHETCO RIVER, OREGON

PARCEL	OWNERSHIP		DATES CONSTRUCTED		USE		PERMIT		FILL ACRAGE		
	PRESENT	WHEN FILLED	START	COMPLETED	ORIGINAL	PRESENT	NUMBER	CLASS	SUBMERGED	SUBMERSIBLE	TOTAL
1-101	Curry County	Curry County c/o	Jan. 1968	Jan. 1970	Marina	Marina	None	None			
1-200	Port of Brookings	Port of Brookings	Jan. 1968	Jan. 1970	Marina	Marina	1507-24-6	Misc.			
1-201	Port of Brookings	Port of Brookings	Dec. 1969	Dec. 1970	Marina	Marina	1507-24-1	Misc.			
1-203	Port of Brookings	Port of Brookings	Dec. 1968	Dec. 1970	Marina	Marina	1507-24-3	Misc.			
1-312	Port of Brookings	Port of Brookings	Dec. 1970	Dec. 1971	Marina	Marina	1507-24-5	Misc.	1.13	2.14	3.27 <sup>1/</sup>
1-317	Port of Brookings	Port of Brookings	Dec. 1970	Dec. 1971	Marina	Marina	1507-24-5	Misc.	--	1.83	1.83
1-308	Port of Brookings	Port of Brookings	Oct. 1968	Oct. 1969	Spoils Area	Parking Lot	1507-24-4	Misc.			
							TOTAL		1.13	3.97	5.10

<sup>1/</sup> Total acreage of filled land fronting Tax Lots 101-200-201-203-312-317