Survey of Oregon Coastal Port Districts: 1976

by

Jeffrey Burger

Internship Report

Submitted to
Marine Resource Management Program
School of Oceanography
Oregon State University
1976

in partial fulfillment of
the requirements for the
degree of
Master of Science

Internship: U.S. Fish & Wildlife Service
Portland, Oregon
MAP G-1 LOCATION OF COASTAL PORT DISTRICTS

PORT OF ASTORIA

PORT OF NEHALEM
PORT OF BAY CITY
PORT OF TILLA BAY

PORT OF TOLEDO
PORT OF NEWPORT
PORT OF ALSEA

PORT OF SIUSLAW
PORT OF UMPQUA

PORT OF COOS BAY
PORT OF BANDON
PORT OF COQUILLE RIV.
PORT OF PORT ORFORD
PORT OF GOLD BEACH
PORT OF BROOKINGS
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INTRODUCTION

Estuaries, an important part of the continental shelf, have been important centers for the economic development of man. They serve as an interface between the terrestrial and oceanic realm and are a part of the ocean that receives the most physical damage.

Different agencies and political groups are vested with the responsibility of managing different aspects of the estuaries. One of the U. S. Fish and Wildlife Service's designated functions is to protect the estuarine biota and its environment. The fifteen coastal port districts are usually more concerned with human use of the estuaries.

While conducting their activities, these two groups tend to have conflicting view points. To improve and coordinate the interaction between the U. S. Fish and Wildlife Service and the Pacific Northwest Port Districts, a series of workshops are planned for the early part of 1977. This paper is designed to aid the U. S. Fish and Wildlife Service in preparing for the workshops.

Topics covered in this paper include a port by port description of commercial and recreational fishing activities (a survey done by the Oregon Fish and Wildlife Department), commercial shipping tonnages (as compiled by the U. S. Army Corps of Engineers), port organizational structure (1976 Oregon Port Directory), and port planning activities including the degree of port planning (whether the port has a comprehensive development plan or plans a project as necessity dictates).
PORT OF ALSEA

P. O. Box 638
Waldport, Oregon 97394	Phone: 563-2468

Commissioners:

Chester W. Waldo, President	June 30, 1977
Larry Kaufman, Vice President	June 30, 1977
Harold Helgerson, Treasurer	June 30, 1977
Robert Norton, Director	June 30, 1977
Michael V. Field, Commissioner	June 30, 1977

Staff:

Litchfield, McPherson, Carsteins, Attorneys
Elizabeth Elkins, Clerk

Estuary Size: 2,230 Acres
Tidelands Area: 979 Acres

Port Commission Meeting: First Wednesday of the Month
PORT OF ALSEA

Overview

The Port of Alsea covers the southern third of Lincoln County. Its headquarters are located at Waldport, (population 700). The city is zoned; most of the port is zoned for recreational use. County zoning was completed in 1971.

Recreational boaters and fishermen come mostly from the Willamette Valley with Albany, Salem, Corvallis, and Eugene being the major sources. These boaters make use of the nine marinas in the area which offer both wet and dry moorage for 479 boats.

The Port Commission feels that to fully develop the harbor jetties are needed. Funds for the construction of a small boat basin at Alsea have been authorized by Congress but the port has not been able to obtain matching funds.

Resource Use

In the Alsea River Estuary, there were 3,401 boat, shore, and tideflat resource users interviewed from March 1 through October 31, 1971.

The study area extended from the mouth of the estuary upstream four miles to Eckman Slough. Approximately 59% of the anglers interviewed were residents of Oregon living outside of Lincoln County, 32%
were Lincoln County residents, and 9% were out-of-state residents.

A total of 25,500 resource users trips (11,900 boat, 10,000 shore, and 3,600 tideflat) were made on the Alsea River Estuary during the study. The 25,500 user trips represented 73,400 man hours of effort (48,800 boat, 19,600 shore, and 5,000 tideflat). The peak months of activity for the boat, shore, and tideflat fisheries were July, October, and June, respectively. Combining all fisheries July was the peak month of activity.

Anglers harvested 34,670 marine animals (5,590 shrimp, 3,140 fish, 23,600 crabs, 2,340 clams, and 200 miscellaneous invertebrates) which is valued at approximately $11,345 ($45 shrimp, $3,000 fish, $8,000 crabs and $300 clams). Dungeness crab comprised 61% of the boat anglers' total catch. Pacific staghorn sculpin, starry flounder, and shiner perch were the principal species of fish caught by shore anglers and represented 95% of their total take. Shrimp comprised 69% of the tideflat users' total take, Ghost shrimp was the principal species collected making up 63% of the harvest. Cockle and softshell clams were the principal species of clam harvested and represented 28% of the tideflat users take. Comparison of the catch for all three fisheries revealed that tideflat users harvested 21,270 or 61% of the total animals taken. Boat and shore anglers harvested 8,600 and 4,800 animals, respectively. Peak months of catch for the boat, shore, and tideflat fisheries were July, July, and May, respectively. The principal catch for the combined fisheries was in May.
Commercial landings of shellfish caught in the Alsea Estuary in 1971 totaled 10,791 pounds valued at $8,000 (dockside price). Ghost and mud shrimp comprised 4% of the take while dungeness crab and salmon made up the remaining 36% and 60%, respectively. The catch for 1974 decreased by 6% to 10,144 pounds with crabs, salmon, and shrimp (Ghost and Mud) constituting 28%, 71% and 1% respectively, of the total catch.

**Commercial Traffic**

No commerce was reported.

**Port Organization Structure**

The port has five commissioners elected for four year terms. They are in charge of handling the financial obligations of the Alsea Port District.

The port does not have an administrator or manager but hires part-time maintenance workers. The only other staff retained by the port is a part-time secretary.

The port levies an annual property tax of approximately $.11 per $1,000 assessed valuation. This tax produces $5,675 from property assessed at approximately $51,592,014. The port also receives approximately $5,000 annually in revenue from the use of the port owned pile driver.

The major expenditures of the port are river maintenance and dock improvements including the operation of a small tug for this work.
Port Planning

The Alsea Port District does not have any comprehensive plan for development. Any projects that are developed arise from single purpose planning done by the port commission.

Various plans for the construction of small private boat moorages and the establishment of pile dikes above Waldport to control the river flow are the only current projects.

The long range goals that the port district has expressed interest in developing are:

1) the construction and maintenance of jetties at the bay entrance with each jetty extending approximately 2,800 feet into the ocean;

2) the establishment and maintenance of a 14-foot navigation channel (at mean lower low water) from the entrance into Lint Slough east of Waldport; and

3) the development of a small boat basin on Lint Slough.

Role of the Port

The Alsea Port Commissioners expect recreational development to be the major activity of the port. The development of commercial aquaculture is also a possibility for the future.
PORT OF ASTORIA

P.O. Box 569
Astoria, Oregon 97103

Phone: 325-4521

Commissioners: Term Expires

Howard B. Johnson, President June 30, 1977
Albert Ressman, Vice President June 30, 1977
J. Frank Hoagland, Secretary June 30, 1977
Frank McIntyre, Treasurer June 30, 1977
James T. Campbell, Assistant Treasurer June 30, 1977

Staff:

George Grove, General Manager
Gail Packard, Traffic Manager
George Fulton, Attorney

Estuary Size: 93,782 Acres
Tidelands Area: 24,507 Acres

Port Commission Meeting: Second Tuesday of Every Month
PORT OF ASTORIA

Overview

The Astoria Port District covers all of Clatsop County. Its headquarters are located at Astoria (population 10,399). The port facilities are within the city limits. The port is working with the county and CREST in developing a land-use plan and a long range Master Facilities Plan.

Logs and lumber being shipped from Astoria come mainly from Clatsop County, Oregon and Pacific County, Washington. Grain is shipped by rail from as far east as Montana. Imports include canned fish from Alaska and newsprint from British Columbia. Recreational boaters and fishermen come mainly from the Portland metropolitan area.

The Corps of Engineers maintains a 40-foot channel in the Columbia River upstream to the Portland area, with a 48-foot deep channel at the Columbia River bar.

Estuary Navigation Depths

Controlling Depth: 38' in the Columbia River and 10' in Youngs Bay.

Project Depth: 40' in the Columbia River and 10' in Youngs Bay.

Bar Depth: 48' at the Columbia River Bar.
### Commercial Traffic

#### Comparative Statement of Traffic
(Short Tons)

<table>
<thead>
<tr>
<th>Year</th>
<th>Vessel Traffic</th>
<th>Rafted Tons</th>
<th>Total Tons</th>
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<tr>
<td>1965</td>
<td>1,013,217</td>
<td>116,996</td>
<td>1,130,213</td>
</tr>
<tr>
<td>1966</td>
<td>1,183,718</td>
<td>59,363</td>
<td>1,243,081</td>
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<td>1967</td>
<td>1,333,429</td>
<td>78,990</td>
<td>1,412,419</td>
</tr>
<tr>
<td>1968</td>
<td>2,304,889</td>
<td>79,614</td>
<td>2,384,503</td>
</tr>
<tr>
<td>1969</td>
<td>1,284,501</td>
<td>83,252</td>
<td>1,367,753</td>
</tr>
<tr>
<td>1970</td>
<td>1,574,661</td>
<td>60,435</td>
<td>1,635,096</td>
</tr>
<tr>
<td>1971</td>
<td>1,444,192</td>
<td>96,785</td>
<td>1,540,977</td>
</tr>
<tr>
<td>1972</td>
<td>1,802,484</td>
<td>119,315</td>
<td>1,921,799</td>
</tr>
<tr>
<td>1973</td>
<td>1,726,891</td>
<td>100,395</td>
<td>1,827,286</td>
</tr>
<tr>
<td>1974</td>
<td>1,411,085</td>
<td>822,669</td>
<td>2,233,754</td>
</tr>
</tbody>
</table>

Of the major shipments going through the Port of Astoria in 1974, rafted logs, logs and wheat comprised 37%, 35% and 11% of the total tonnage, respectively. Various smaller shipments constituted the remaining 17%.
Recreational Fisheries

Due to the vast size and the many points of accessibility to the Columbia River Estuary a survey of the public use of this port was not conducted.

Commercial Fisheries

In 1971, there were 29,253,410 pounds of commercial food fish landed at Astoria. Tuna, groundfish, and crabs comprised 38%, 35%, and 17% of the total take, respectively. Shrimp and salmon made up the remaining 10%. The total monetary value of the 1971 catch was $5,683,000.

The 1974 catch was 45,230,637 pounds of food fish, a 54.6% increase over 1971. The monetary value of this catch was $14,004,000 at dockside. Tuna, groundfish, shrimp, crabs, and salmon comprised 59%, 22%, 13%, 4% and 2% of the total 1974 catch, respectively.

Astoria Port Facility Inventory

The Port of Astoria has three piers and nine berths which offer 6,300 lineal footage of moorage space. In 1974 there were about 250 ship arrivals with approximately 30 of these having a draft of 30 feet or more.

The Port owns two marinas: Fisherman's Dock and Marina and the East End Mooring Basin. These two facilities combined have 475
moorage spaces. On the average, 109 of these spaces are for permanent use.

**Port Organization Structure**

The Astoria Port District has five port commissioners that are elected for a four year term. The commissioners formulate policy in relation to the Port's duties and powers as authorized by Oregon Statutes.

The commissioners hire the port staff, which is composed of the general manager, port engineer, traffic manager, and three office staff members.

The total assessed valuation of property within the port district, which comprises all of Clatsop County, is approximately $387,000,000. The port levies an annual property tax, at approximately $.68 per $1,000 valuation, which produces about $263,000 in tax revenue.

The major expenses of the port district are dock operations and dock maintenance.

**Port Planning**

Planning is done by the port commissioners and managers. They are developing a land use plan and a long range Master Facilities Plan in conjunction with the county and CREST. Among other things, this plan will indicate the areas available to the port for expansion as well as
the types of cargoes the port should be seeking.

Future port development goals are outlined below.

1. At Tongue Point: 1) acquire, from the Federal Government, property declared surplus by the U.S. Department of Labor (including piers and land); 2) dredge the channel at Tongue Point to a depth of at least 40 feet and develop and adapt the hangar areas for handling inbound and outbound cargo; and 3) encourage light industries or assembly plants to be developed in the Tongue Point area. Preparation of the site would ultimately include blacktopping of the area presently leveled but not surfaced.

2. Fill an additional 80 acres west of pier 3: This fill would complete expansion of the present port complex area and is planned for the handling of containerized shipments, movement of steel products and for the possible construction of the bulk loading facility.

3. At Tansy Point: acquire the Tansy Point area from present owners, and initiate zone changes in order to encourage the development of light industry and the handling of bulk cargo, most likely in the form of a grain elevator.

4. Fill a portion of the slips between Piers 2 and 3. This filled area would provide additional storage area and reduce the maintenance costs of the present piers. Such fill could be 12
hastened by the reduction in the export of logs.

5. Develop an industrial park in the airport property. It is presently included in the approved airport master plan. This park would be used for light industry, assembly plants and similar projects.

6. Purchase the present Alumax land site in Warrenton. This site would be developed for light industry which meets all environmental standards set forth by federal, state, and local agencies.

7. Improve and expand the existing grain elevator.

8. Rehabilitate and improve the existing piers.

9. Assist Brown and Root Company in developing the Skipanon Slough Area as a deep-sea oil well drilling platform assembly area.

The above listed projects require funding. The Port of Astoria has applied for $13.5 million in special federal Economic Development Administration (EDA) grants to implement their development plan.

Role of the Port

The commissioners of the Astoria Port District see the major role of the port as being a developer of the economy through maritime commerce and associated activities.
PORT OF BANDON

P. O. Box 206
Bandon, Oregon 97411

Phone: 347-3206

Commissioners:

Walter Moore, President
James Weber, Vice President
James Hanna, Secretary-Treasurer
Hugh McNeil, Commissioner
Craig Perrott, Commissioner

Term Expires

June 30, 1977
June 30, 1977
June 30, 1977
June 30, 1977
June 30, 1977

Staff:

Robert A. Belcher, Port Manager

Estuary Size: 771 Acres
Tidelands Area: 301 Acres

Port Commission Meeting: Second Wednesday of Each Month
PORT OF BANDON

Overview

The Bandon Port District covers the south coastal portion of Coos County. Its headquarters are located in Bandon (population 1,832).

The harbor at Bandon, on the Coquille Estuary, has an authorized channel depth of 13 feet extending 1.3 miles upstream from the river mouth. Shallow water problems occur at the bar during low water periods, in addition the boat basin is affected by ocean swell traveling up the estuary.

The port owns a boat basin and an open dock containing about 2.5 acres of storage space used for lumber shipments.

A seafood processing plant and a lumber mill are the main industrial users of the port with the lumber mill gradually decreasing its production.

Resource Use

In the Coquille Estuary, there were 1,809 boat, shore, and tide-flat users interviewed from March 1 through October 31, 1971. Of the people that used the Coquille Estuary over half (53%) of the anglers interviewed were residents of Coos County, 35% were Oregon residents from outside Coos County, and 12% were out-of-state residents.
Recreational Fisheries

A total of 13,700 resource user trips (1,800 boat, 11,700 shore and 200 tideflat) were made on the Coquille Estuary during the study. The 13,700 user trips represented 30,300 man hours of effort (5,000 boat, 25,100 shore, and 200 tideflat). Peak activities for the boat, shore and tideflat fisheries were in August, July, and March, respectively. July was the peak month of activity for the combined fisheries.

Resource users harvested 67,600 animals (62,000 fish, 3,000 crabs and 2,600 clams) valued at $9,100 dockside price. Dungeness crab, valued at approximately $1,000, comprised 91% of the boat anglers' total catch. Fish were the principal animals harvested by shore anglers having a value of $7,750 and representing 99% of their total catch. Surf smelt was the main species caught by the shore anglers. Softshell clams having a value of approximately $350 represented 99% of the tideflat users total take.

Comparison of the catch for all three fisheries revealed that shore anglers harvested 62,500 or 92% of the total take. Boat anglers and tideflat users each harvested approximately 4% of the combined total take. Peak catch for the boat, shore, and tideflat fisheries occurred in June, July, and July, respectively. Combining all fisheries, July was the principal month of catch.

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Commercial Fisheries

Commercial landing of food fish caught in the Coquille River Estuary in 1971 totaled 14,022 pounds valued at $2,351 at dockside. Sand constituted 96% of the 14,022 pounds.

The total 1971 poundage of food fish brought into the Coquille Estuary at Bandon was 530,922 pounds valued at $175,000 at dockside. Salmon comprised 92% of the total poundage. In 1974, a total of 668,065 pounds were brought into the estuary having a value of $458,000. Salmon, ground fish, and tuna comprised 75%, 9%, and 9% of the catch, respectively with various fish comprising the remaining 7%. The 1974 catch was a 26% increase over the 1971 catch.
### Commercial Traffic

#### Comparative Statement of Traffic

(Short Tons)

<table>
<thead>
<tr>
<th>Year</th>
<th>Tons</th>
<th>Year</th>
<th>Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1958</td>
<td>354,000</td>
<td>1967</td>
<td>460,000</td>
</tr>
<tr>
<td>1959</td>
<td>425,000</td>
<td>1968</td>
<td>481,000</td>
</tr>
<tr>
<td>1960</td>
<td>522,000</td>
<td>1969</td>
<td>370,000</td>
</tr>
<tr>
<td>1961</td>
<td>639,000</td>
<td>1970</td>
<td>364,000</td>
</tr>
<tr>
<td>1962</td>
<td>636,000</td>
<td>1971</td>
<td>243,000</td>
</tr>
<tr>
<td>1963</td>
<td>421,000</td>
<td>1972</td>
<td>144,000</td>
</tr>
<tr>
<td>1964</td>
<td>513,000</td>
<td>1973</td>
<td>107,000</td>
</tr>
<tr>
<td>1965</td>
<td>520,000</td>
<td>1974</td>
<td>73,000</td>
</tr>
<tr>
<td>1966</td>
<td>513,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Of the 73,000 short tons shipped out of the Port of Bandon, 99% of it was finished lumber.
Port Organization Structure

The port has five commissioners that are elected for four year terms. The only paid staff is the port manager whose duties vary from being harbor master to clearing snags on the Coquille River.

The port levies an annual property tax of approximately $0.19 per $1,000 on assessed valuation of approximately $97,000,000. The largest expenditure of the Port of Bandon budget involves the operation of the boat basin.

Port Planning

The commissioners and port manager constitute the planning body for the Port of Bandon. They have developed a limited comprehensive three phase (short term) plan for Bandon; phase one has been completed.

Short Range Goals

Phase I. Construction of a $75,000 boat basin providing 75 new private moorages including a holding tank for waste crankcase oil and fuel.

Phase II. In the spring of 1977 the port will replace the remaining old wooden floats with new concrete floats.

Phase III. In the spring of 1978, the port plans to construct a two lane boat launching ramp with restroom-shower facilities in the boat basin area.
Long Range Goals

I. Repair the existing north and south jetties.

II. Extension of the north and south jetties by approximately 1,000 feet.

III. Deepening the navigation channel from 13 feet to 16 feet at mean lower low water.

IV. Establishment of a breakwater around the boat basin.

V. Development of other shoreside boat basin facilities, for example, a dry marina.

Role of the Port

The Port of Bandon Commissioners expect recreational and commercial fishing to play a larger role in the future with lumber being of lesser importance.
PORT OF BAY CITY

P. O. Box 228
Garibaldi, Oregon 97118  Phone: 322-3292

Commissioners:  Term Expires

F. J. Vermilyea, President  June 30, 1977
Henri Dupre, Vice President  June 30, 1977
Tom Graham, Secretary  June 30, 1977
Robert Watt, Jr., Treasurer  June 30, 1977
Jack Graves, Commissioner  June 30, 1977

Staff:

Basil Edmunds, Manager
Warren McMinimee, Legal Advisor
B. R. Taylor, Harbor Master
Shirley Smith, Secretary

Estuary Size: 8,480 Acres
Tidelands Area: 4,163 Acres

Port Commission Meeting: Second Wednesday of Each Month
PORT OF BAY CITY

Overview

The Port of Bay City District covers the north central portion of Tillamook County. Port facilities are located at Garibaldi (population 1,083). The port commission has submitted plans for its activities at Garibaldi and Bay City to the county land-use planning board.

Commercial fishing boats come from most west coast ports. Some boats operate at distances which require icing for the preservation of their catch. Most recreational boaters come from the Willamette Valley area, with the heaviest concentration of users coming from the Portland metropolitan area.

Because the Port of Bay City and the Port of Tillamook Bay are located on the same estuary, many of the activities and planning are coordinated.

Resource Use

In the Tillamook Bay area, there were 15,700 boat and shore anglers, and tideflat users interviewed from March 1 through October 31, 1971.

Nearly three-fourths (73%) of the anglers interviewed were residents of the state outside of Tillamook County, 21% were Tillamook County residents and 6% were nonresidents. This is a high proportion
of state residents and reflects heavy usage by Portland residents of this estuary.

Recreational Fisheries

In Tillamook Bay, 66,500 recreational user trips (24,500 boat, 17,500 shore, and 24,500 tideflat) were made in the 8,480 acre estuary during the interview period. The 66,500 user trips represented 172,300 man hours of effort (98,500 boat, 35,600 shore, and 38,200 tideflat).

Anglers harvested 66,700 marine animals (20,400 fish, 32,800 crabs, 613,800 clams). Crabs valued at $16,000 dockside price comprised 93% of the boat anglers' total catch. Fish were the principal marine animals harvested by shore anglers and represented 98% of the total take. Pile perch was the principal species caught followed by kelp, greenling and shiner perch. Clams comprised 94% of the tideflat users total take having a value of $16,000 dockside price. Cockle and littleneck clams were the principal species taken making up 39% and 38% of the harvest, respectively.

Comparison of the catch for all three fisheries revealed that tideflat users harvested 650,600 or 92% of the total animals taken while boat and shore anglers caught 35,000 and 18,000 marine animals respectively. Peak months of catch were September for the tideflat fishery. Combining all fisheries, July was the principal month of catch.
Commercial Fisheries

Commercial landing of marine food fish and shellfish caught in Tillamook Bay in 1971 totaled 343,130 pounds valued at $300,000 (dockside price). Oysters and dungeness crab constituted 70% and 27% of this harvest with the remaining 3% being comprised of various miscellaneous species. The total take brought into the Tillamook Bay Estuary in 1971 was 3,115,941 pounds valued at $904,000. Crabs, shrimp, and salmon constituted 32%, 29% and 26% of the catch. Various species comprised the remaining 3%. Commercial landings in Tillamook Bay for 1971 was 11% of the total catch.

The 1974 catch of 3,455,369 pounds valued at $1,418,000 was 11% over the 1971 catch. Shrimp, salmon and crab comprised 68%, 13% and 8% of the total catch with the various species comprising the remaining 11%.

Tillamook Bay

Section included: Entrance and Bay to Garibaldi. 3 miles.

Controlling Depth: 15' across Bar, 15' in Channel to Garibaldi.

Project Depth: 18' over bar and in Bay to Miami Cove, 12' approach channel at Baribaldi.
## Commercial Traffic

Comparative Statement of Traffic (Short Tons)

<table>
<thead>
<tr>
<th>Year</th>
<th>Vessel Traffic (Tons)</th>
<th>Rafted Tons</th>
<th>Total</th>
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<tr>
<td>1965</td>
<td>189,459</td>
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<td>1966</td>
<td>458</td>
<td>68,427</td>
<td>68,885</td>
</tr>
<tr>
<td>1967</td>
<td>807</td>
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<tr>
<td>1968</td>
<td>447</td>
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<td>1969</td>
<td>250,001</td>
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</tr>
<tr>
<td>1971</td>
<td>228,654</td>
<td>0</td>
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</tr>
<tr>
<td>1972</td>
<td>207,159</td>
<td>0</td>
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</tr>
<tr>
<td>1973</td>
<td>270,497</td>
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<tr>
<td>1974</td>
<td>365,251</td>
<td>0</td>
<td>365,251</td>
</tr>
</tbody>
</table>

Of the 365,251 short tons shipped through the Tillamook Bay area in 1974, 99% of it was imported sand, gravel and crushed rock.
Port Facility Inventory

The Port District of Bay City operates a marina that has five piers, one of which is leased to a boat rental firm. Approximately 22 charter boats and 150 to 175 recreational boats are permanently moored in the 325 berth marina. This facility also serves commercial fishermen. On peak weekends, at least 500 boats may use this area. The port district also completed construction of a new barge dock at Garibaldi in November, 1974.

Port Organizational Structure

The Bay City Port District is served by five commissioners who are elected for four year terms. They are responsible for port planning and management.

The Bay City port commissioners employ a small staff including a port administrator, harbor master, part-time secretary, and part-time summer help.

The port district levies an annual property tax of approximately $0.66 per $1,000 assessed valuation. Tax revenues are about $33,700 per year. The port commission plans to keep costs within budgetary limitations in order to avoid special tax elections. The major expenditures have been moorage operations and improvements to the neighboring lands and facilities.
Port Planning

The Bay City port manager and commissioners develop initial port plans. In January of 1975, they developed a Port District Master Plan. However, as the port personnel have stated, the desires and attitudes of people change. With new personnel representing the port from year to year, the port planners feel compelled to make their own recommendations. Therefore, in essence, the Bay City Port District relies on single purpose planning, with a set of general goals by which to develop their port.

The following is a list of those goals.

1. A 1,500 foot extension of the south jetty to make it equal in length to the north jetty.
2. Expansion of the existing small boat basin at Garibaldi.
3. Development and maintenance of a side channel in Miami Cove and development of moorage, launching and supporting facilities there.
4. Development of a main multiple-purpose channel up to 16 feet deep and 150 feet wide from Garibaldi to the head of navigation on the Tillamook River.
5. Development and maintenance of a recreational boating and flood relief channel, not less than 6 feet deep and 80 feet wide, off the main bay channel into the Kilches River with a
sediment settling basin 9 feet deep, 400 feet wide and 800 feet long (a sediment settling basin is to collect river sediments which would otherwise deposit in the channel and river mouth suffocating clam and oyster populations and causing other biological damage).

6. Establishment of a nature sanctuary or preserve on the tide and mud flat area between the Kilches and Wilson River channels.

7. Establishment of a pedestrian fishing pier on the restored Dick Point Dike.

8. Development of a sediment settling basin 20 feet deep and 600 feet wide and 2,000 feet long at the confluence of the Tillamook and Trask Rivers.

9. Development and maintenance of a recreational boating and flood relief channel (straightening Hoquarten Slough into the City of Tillamook) not less than 6 feet deep and 80 feet wide, and connecting it to the sediment settling basin at the confluence of the Tillamook and Trask Rivers.

10. Development of boat basins, launching and related shore side facilities in the upper bay as demand dictates.

**Extent of Present Projects**

1. The U. S. Fish and Wildlife Service approved a permit
February 9, 1976, for the maintenance dredging of the Tillamook Bay Channel near Miami Cove and the small boat basin channel near Garibaldi to a depth of 12 feet. This dredging is to be conducted during the months of March through July, to reduce the impact on Dungeness crabs that use the area.

2. On February 11, 1976, the U. S. Fish and Wildlife Service approved a permit for the intermittent maintenance dredging of the Tillamook Bar Entrance Channel. Dredging to 18 feet will be done during the months of March through July in 1976, 1977 and 1978.

3. On August 9, 1976, the U. S. Fish and Wildlife Service approved a permit for the maintenance dredging of the small boat basin at Garibaldi. It will be dredged to a depth of 12 feet in early 1977.

**Role of the Port**

The port commission's main interest is to develop as many moorage and harbor facilities for commerce and recreation as the waters of the bay can support.
PORT OF BROOKINGS

P. O. Box 848
Brookings, Oregon 97415 Phone: 469-2218

Commissioners: Term Expires

Fred Stutsman, President June 30, 1977
Glenn Rogers, Vice President June 30, 1977
Robert G. Earle, Secretary-Treasurer June 30, 1977
Arthur J. Anderson, Commissioner June 30, 1977
Ron Fallert, Commissioner June 30, 1977

Staff:

Joseph W. Sabia, Port Manager/Harbor Master
B. A. Martin, Port Engineer
Mary L. O’Neill, Assistant Secretary-Treasurer
Joseph Milhollin, Utility

Estuary Size: 102 Acres
Tidelands Area: 12 Acres

Port Commission Meeting: First Tuesday of Each Month
PORT OF BROOKINGS

Overview

The Port of Brookings covers the southern third of Curry County. The port operations are situated in Brookings (population 2,720). The port lands are located outside the city limits of Brookings.

Commercial fishing boats from the entire United States West Coast utilize the port during the fishing season. Recreationists come from California, Arizona, and the Klamath Falls, Medford, Grants Pass, Burns, and Lakeview areas.

The port commission is developing its basin capacity. The Coast Guard has increased its personnel in the area to handle the increased port usage. The Corps of Engineers is studying the possibility or feasibility of extending the jetties.

Resource Use

From March 1 through October 31, 1971, 2,412 boat and shore anglers were interviewed on the Chetco Estuary from the seaward ends of the two jetties to the Highway 101 bridge.

Nearly half (49%) of the anglers interviewed were residents of Oregon living outside of Curry County. Thirty percent of the resource users were from Curry County and 21% were not residents of Oregon.
The high proportion of nonresidents reflects the heavy use of this estuary by Californians. During the study period no other estuary had such a high nonresident use.

Recreational Fisheries

A total of 23,200 resource user trips (1,600 boat and 21,600 shore) were made on the Chetco Estuary during the study. These trips represent 53,100 man hours of effort (6,100 boat and 47,000 shore). The peak month of activity was October for the boat fishery and July for the shore fishery. July was the peak month of activity for the combined fisheries. Areas receiving the principal use for the boat and shore fishery were below the Highway 101 bridge and on the north jetty, respectively.

The two fisheries harvested 42,800 marine animals valued at $570 (42,600 fish-$500, 200 crabs-$70). Northern anchovy comprised 79% and 68% of the boat and shore anglers' catch, respectively. Comparing the catch for the two fisheries revealed that shore anglers harvested 37,500 or 88% of the total taken.

Boat anglers caught 5,300 marine animals of 12% of the total catch. Peak month of catch was July for the boat and shore fisheries.

Commercial Fisheries

Commercial landings of marine food fish caught in the Chetco River Estuary in 1971 totaled 5,108 pounds valued at $2,554
(fisherman's level), with the northern anchovy the only species landed.
The food fish landings for the year 1971 totaled 5,227,943 pounds valued at $1,350,000 (fisherman's level). Salmon, groundfish, crabs, and shrimp comprised 38%, 23%, 21% and 15% of the total 1971 catch, respectively. Various fish species comprised the remaining 3%.

By 1974, the total catch of food fish was 3,372,504 pounds, a decrease of 35%. This was valued at $1,031,000. Groundfish, shrimp, and salmon comprised 55%, 21%, and 13% of the total 1974 catch, respectively. Various fish species comprised the remaining 11%.

**Commercial Traffic**

**Comparative Statement of Traffic (Short Tons)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Tons</th>
<th>Year</th>
<th>Tons</th>
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</thead>
<tbody>
<tr>
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<td>1967</td>
<td>167,000</td>
</tr>
<tr>
<td>1959</td>
<td>3,000</td>
<td>1968</td>
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<td>1963</td>
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</tr>
<tr>
<td>1964</td>
<td>76,000</td>
<td>1973</td>
<td>120,000</td>
</tr>
<tr>
<td>1965</td>
<td>184,000</td>
<td>1974</td>
<td>95,000</td>
</tr>
<tr>
<td>1966</td>
<td>191,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In 1974, lumber constituted 88% of the total exports with veneer, plywood, and worked wood comprising 10% of the 95,000 tons that were exported.

Brookings Port Facility Inventory

The Port of Brookings has two boat basins located within the Chetco River Estuary. The Commercial Boat Basin has 275 permanent moorage slips while there are 580 sport boats moored in the No. 1 Boat Basin. The combined moorage capacity is 855 slips.

Port Organization Structure

The Port of Brookings has five commissioners who are elected for terms of four years. Their duties are to handle the port finances and to assist in developing the port.

The port district annually levies a property tax of approximately $.72 per $1,000 assessed valuation producing about $40,000 in annual revenue.

The largest part of the port budget has been for the development of the boat basins.

The port staff includes a port manager, an engineer, a harbor master, a dock attendant, a secretary, plus additional help.
Port Planning

The Brookings port manager and port commissioners have developed a comprehensive plan for developing the port.

Comprehensive Future Development Plan

Phase I 1976/77.

1. Replace existing deteriorated untreated pilings in boat basin No. 1.
2. Enlarge boat basin No. 1 by excavating 40 feet of the embankment from the east side of the basin.
3. Rearrange the docks in basin No. 1 to enable maximum utilization of the basin.
4. Install additional docks in the No. 1 boat basin with a down ramp at the top of each dock.
5. Install additional floating docks and lengthen existing docks in boat basin No. 2.
6. Construct a marine railway for the use of the over 300 commercial vessels utilizing this port.
7. Install four submerged 500 gallon capacity tanks for waste oil around the No. 2 boat basin.
8. Implement action to develop the jetties at the mouth of the Chetco River.
Phase II 1977/78

1. Install a two stall coin operated boat washing facility.
2. Construct a large building suitable for maintenance and repair projects.
3. Install a concrete sidewalk and safety railing along the east side of the No. 1 boat basin.
4. Install three submerged 250 gallon capacity tanks for waste oil around the No. 1 boat basin.
5. Construct shower rooms on the east and west sides of the No. 2 boat basin.

Phase III 1978/79

1. Replace restrooms/showers at the Sporthaven Trailer Park.
2. Replace two restrooms located at the No. 1 boat basin.
3. Install electricity and water on the docks in the No. 1 boat basin.

Role of the Port

The Port of Brookings' major interest is in recreational and commercial fishing, but it has retained an interest in developing barge traffic for the Chetco River.
PORT OF COOS BAY

P. O. Box 1226
Coos Bay, Oregon 97420 Phone: 269-1131

Commissioners: Term Expires

J. Larry Qualman, President June 30, 1977
Robert I. Younker, Vice President June 30, 1977
Holly Hall, Secretary June 30, 1977
Kenneth L. Lewis, Treasurer June 30, 1977
Kenneth L. Lewis, Treasurer June 30, 1977
Wilbur Craig, Commissioner June 30, 1977

Staff:

Steve Filkins, Port Administrator
Lois J. Hall, Office Manager
Ernest Knutson, Manager, Charleston Boat Basin
Alec Whalen, Assistant to the Harbor Master
George T. Gant, Port Attorney

Estuary Size: 9,543 Acres
Tidelands Area: 4,569 Acres

Port Commission Meeting: Second Tuesday of Each Month
PORT OF COOS BAY

Overview

The Coos Bay Port District covers the Northern portion of Coos Bay County. Its headquarters are in Coos Bay (population 13,466). A comprehensive county land-use plan was developed but was rejected in 1976 by LCDC. The port has a comprehensive plan for development. There are no zoning conflicts in port activity areas with the City of Coos Bay. Some port industrial lands, however, have been the subject of ecological conflicts.

Timber shipped through the port comes from the regions of Smith River, Eugene, and Cottage Grove. Recreational boaters come mainly from the Roseburg and Grants Pass-Medford areas. Transient fishing vessels are drawn from most U.S. coast regions. The crab and tuna seasons draw the boats from outside the local area.

The Corps has kept silting under control by annual dredging and they have begun a project to deepen the entrance and widen the upper half of the channel.

Resource Use

In the Coos Bay area, there were 6,497 boat, shore and tideflat users interviewed from March 1 through October 31, 1971.
Over half (52%) of the anglers interviewed were Coos County residents. This is a high proportion of local users as compared to findings in other bays, probably due to the large number of people living within easy driving distance of the estuary. Also, 34% of the resource users were state residents from outside Coos County and 14% were nonresidents.

Recreational Fisheries

Analysis of Coos Bay data revealed that 67,900 resource users' trips (11,500 boat, 37,100 shore, and 19,300 tideflat) were made on the estuary during the study. The 67,900 user trips represent 152,000 man hours of effort (32,800 boat, 87,800 shore, and 31,400 tideflat). The peak month of activity was August for the boat and shore fishery, and July for the tideflat fishery.

Anglers of the three fisheries harvested 416,000 marine animals (277,500 clams, 51,100 crabs, 49,400 fish, and 38,000 miscellaneous invertebrates) valued at $57,300. Crabs comprised 82% of the boat anglers' total catch valued at $17,600. Shiner perch was the principal fish caught by shore anglers which have a value of approximately $14,000. Clams comprised 91% of the tideflat users total take which has a monetary value of approximately $25,700. Gaper clam was the principal clam species dug making up 35% of the harvest. Cockle clam, the second most important clam harvested, made up 18% of the take.
Ghost shrimp was the principal species of miscellaneous invertebrates collected by the tideflat users. Comparing the catch for all three fisheries revealed that tideflat users harvested 305,500 or 73% of the total animals taken. Peak month of catch was July for the boat and tideflat fishery and June for the shore fishery. Combining all fisheries, July was the principal month of catch.

**Commercial Fisheries**

Commercial landings of marine food fish and shellfish caught in Coos Bay in 1971 totaled 99,440 pounds valued at $16,266. Shad and Dungeness crab comprised 55% and 24% of this total take, respectively.

The total landings for Coos Bay in 1971 was 8,809,929 pounds valued at $1,934,000 (dockside price). Of this total food fish landings, groundfish, salmon, crabs, and shrimp made up 31%, 26%, 22% and 17% of it respectively. Various fish species comprised the remaining 4%.

By 1974, the total food fish landings increased 56% to a total poundage of 15,720,215 valued at $6,130,000 (dockside price). Shrimp, groundfish, salmon, and tuna comprised 31%, 23%, 21%, and 20% of the total 1974 landings, respectively. Various fish species comprised the remaining 5%.
Port of Coos Bay

Section Included: From sea to Millington, a distance of 17 miles.

Controlling Depth: 40' in entrance channel; 30' in inner channel to mile 15; 20' in Isthmus Slough to Millington.

Project Depth: 45' on bar and 35' from entrance to mile 15; turning basins of same depth opposite Coalbank Slough and at the City of North Bend. A channel 22' deep from mile 15 to Millington; mooring basin for small boats at Charleston, with a connecting channel 10' deep to deep water in Coos Bay.

Commercial Traffic

Comparative Statement of Traffic
(Short Tons)

<table>
<thead>
<tr>
<th>Year</th>
<th>Vessel Traffic</th>
<th>Rafted Tons</th>
<th>Total Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965</td>
<td>1,531,181</td>
<td>2,583,850</td>
<td>4,115,031</td>
</tr>
<tr>
<td>1966</td>
<td>1,777,084</td>
<td>3,488,711</td>
<td>5,265,795</td>
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<tr>
<td>1967</td>
<td>2,505,928</td>
<td>1,443,241</td>
<td>3,949,169</td>
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<tr>
<td>1968</td>
<td>3,282,012</td>
<td>2,464,917</td>
<td>5,746,929</td>
</tr>
<tr>
<td>1969</td>
<td>3,563,415</td>
<td>2,538,356</td>
<td>6,101,771</td>
</tr>
<tr>
<td>1970</td>
<td>3,968,960</td>
<td>2,129,818</td>
<td>6,098,778</td>
</tr>
<tr>
<td>1971</td>
<td>3,665,864</td>
<td>3,081,643</td>
<td>6,747,507</td>
</tr>
<tr>
<td>1972</td>
<td>4,758,080</td>
<td>1,785,695</td>
<td>6,543,775</td>
</tr>
<tr>
<td>1973</td>
<td>5,773,331</td>
<td>1,957,377</td>
<td>7,730,708</td>
</tr>
<tr>
<td>1974</td>
<td>6,499,025</td>
<td>1,133,806</td>
<td>7,632,831</td>
</tr>
</tbody>
</table>

Of the 7,632,831 short tons handled by the port of Coos Bay in 1974, 56%, 15%, 10% and 9% of it was wood chips, rafted logs, lumber, and logs, in that order. Various commodities comprised the remaining 10%
Coos Bay Port Facility Inventory

Thirteen private docks provide 18 berths for large ships with one berth being in a deteriorated state. An additional 40 feet of dolphin tie-up is available. Two berths are at oil docks used for fuel handling.

There are no public docks in Coos Bay, with most private docks owned by lumber or logging interests. Three local log dumps and two upriver log dumps also serve the local forest industry. Two of the private docks, however, are open to all on equal terms.

There are two marinas located in Coos Bay. The Charleston Boat Basin provides 575 wet moorages and 94 dry storage units. Hanson's landing in Charleston provides moorage for about 100 boats.

In addition, some of the local fish processing plants maintain docks for the fishermen that sell to them, and the City of Coos Bay has one dock that is used mainly as a transient dock. Those docks are listed as follows:

1. Hallmark Fisheries, approximately 20 moorage spaces.
2. Peterson Sea Foods, approximately 150 moorage spaces.
3. Eureka Fisheries, approximately 10 moorage spaces.
4. City of Coos Bay, approximately 10 moorage spaces.
Port Organization Structure

The Port of Coos Bay has five port commissioners who are elected for a term of four years. They plan and develop the Port of Coos Bay in relation to the Port's duties under Oregon Statutes.

The Coos Bay Port Commission employs a staff that includes a port administrator, budget officer, assistant-treasurer, Charleston boat basin manager, basin assistant, office manager, and three additional helpers (one in the office and two in the small boat basin).

The port district levies an annual property tax of approximately $.45 per $1,000 assessed valuation. Tax revenues are approximately $130,000 annually. The major expense in the Port of Coos Bay budget involves the operation of the small boat basin and land purchases and development.

Port Planning

Port development and planning originates with the port commissioners, administrator, and managers. They have developed a comprehensive plan for the port area that includes the following projects.

Current Projects

1. The Army Corps of Engineers is currently completing dredging operations in Coos Bay. The Corps is dredging the entrance to 45 feet and the inner channel to 35 feet.
Approved Projects

1. The application for maintenance dredging of the Charleston Navigation Channel to a depth of 10 feet was received May 3, 1976.

2. The permit for the dredging of the Coos and Millicoma Rivers, providing a usable channel depth of 5 feet, was received April 23, 1976.

Future Projects

1. The Port of Coos Bay is considering the development of a transient fishing boat pier in the Charleston Boat Basin area.

2. The Charleston Channel is being considered for realignment in the process of maintenance dredging.

3. CH₂M Hill engineers have developed plans for eight deep water berths on the North Spit Area. Six of the berths will be for general and bulk cargo, one berth will be for the handling of petroleum tankers, and one berth will be for a trawler fleet terminal. This area is being developed for shipping because the increasing size of cargo ships makes it more difficult to navigate through the two bridges spanning the Coos Bay Estuary to reach the present terminal area. At present, the Port of Coos Bay is negotiating with North Spit landholders to develop an access route to the proposed terminal area.
4. Weyerhauser Company is contemplating leasing 30 acres of port owned land on the North Spit for the development of a salmon sea-ranch.

Role of the Port

The major role of the Port of Coos Bay Commission will be to develop the economy of the area through maritime commerce.
PORT OF COQUILLE RIVER

P.O. Box 238
Myrtle Point, Oregon 97458

Phone: 572-5937

Commissioners:

Robert Geaney, President
Glen Gulstron, Vice President
Melvin Zumwalt, Secretary
Tom Coffman, Treasurer
Ernest Bryant, Commissioner

Term Expires

June 30, 1977

Staff:

Thomas Murray, Port Attorney
5858 S.W. Ralston Drive
Portland, Oregon

Estuary Size: Nonestuarine
Tidelands Area: Nonestuarine

Port Commission Meeting: Third Wednesday of Each Month

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PORT OF COQUILLE RIVER

Overview

The Coquille Port District covers the southeastern third of Coos County. The port commission is located at Myrtle Point (population 2,511).

Operational problems are caused by slides, snags, caving banks, and flooding. Snag removal and other activities by the Corps of Engineers are authorized only to Coquille, about 13 miles below the former head of navigation at Myrtle Point. At present the river is too shallow for barge operations.

Resource Use

Due to the geographic location of the Coquille Port, public and commercial use of the area is negligible. If a major use of the Coquille River were to be identified it would be pleasure boating.

Commercial Shipping

No traffic reported.

Port Organization Structure

The port has five commissioners elected for four year terms.
They are responsible for overseeing the vested interests of the port district.

The port levies a property tax at irregular intervals. The rate is approximately $.12 per $1,000 on assessed property valuation of approximately $60,000,000.

Since the port has no paid staff, but pays for services when they are needed, the major budget item is devoted to stream clearance.

**Port Planning**

The port commission does not have any comprehensive plans for developing the Port District, however, they stated an interest in the activities listed below.

1. Clear snags and debris and provide for a continuance of such stream clearance after severe floods in the Coquille River Basin above Coquille, Oregon.

2. Develop and maintain a shallow draft navigation channel for recreational boating on the main stem of the Coquille River from the Coquille River Bridge (now the upstream terminus of the Corps Navigation project) into the tributaries and sediment settling basins in the North Fork, East Fork, Middle Fork, and South Fork areas of the Coquille River.

3. Establish bank erosion control works.

4. Develop additional boat launching, parking, camping and
picnicing facilities along the river for recreational and sport fishing use.

Role of the Port

The major role of the Port of Coquille Commission is in snag removal and flood control. They are interested in developing recreational boating and fishing.
PORT OF GOLD BEACH

P. O. Box 1126
Gold Beach, Oregon 97444
Phone: 247-6269

Commissioners:

William T. Tankersley, President
Rodney M. Nourse, Vice President
Louis R. Giottonini, III, Secretary-Treas.
Robert L. Mead, Commissioner
Dr. John B. Rush, Commissioner

Term Expires:
June 30, 1977

Staff:

Robert E. Strain, Manager
John Spicer, Port Attorney
Don Ament, Budget Officer

Estuary Size: 627 Acres
Tidelands Area: 149 Acres

Port Commission Meeting: First Wednesday and Third Tuesday of Each Month
PORT OF GOLD BEACH

Overview

The Port of Gold Beach occupies the west-central portion of Curry County. Its headquarters is situated in the City of Gold Beach (population 1,554).

During the fishing and tourist season, many of the visitors are Californians. Most of the Oregonians that use the Gold Beach facilities come from the Klamath Falls, Medford, Grants Pass areas.

The port is expanding its moorage facilities. Two basic problems for the expansion of the port lie in the build-up of gravel at the bar and the water quality in the 77 acre boat basin.

Resource Use

In the Rogue Estuary there were 41 shore anglers interviewed to estimate catch and effort values and angler origin. No boat anglers or tideflat users were encountered during the study period of March 1 through April 30, 1971.

The study area extended from the seaward ends of the two jetties upstream one mile to the Rogue River Resort.

Approximately 59% of the anglers interviewed were residents of Curry County. Twenty-six percent of the anglers were residents of Oregon living outside of Curry County and 15% were nonresidents.
Recreational Fisheries

Interview data revealed that 350 angler trips were made on the Rogue River Estuary. These shore anglers spent 600 man hours fishing. The south jetty was the principal fishing area with 85% of the anglers fishing there. The redtail surfperch was the only fish identified in the shore anglers' catch valued at $190. Of the 600 fish caught, 99% were taken in April.

Commercial Fisheries

No food fish or shellfish were harvested commercially from the estuary in 1971. A total of 237,594 pounds of commercial food fish was brought into the estuary in 1971 with salmon making up 97% of the catch valued at approximately $71,000. By 1974, the total catch decreased from 1971 by 6% to 223,811 pounds of edible foodfish, with salmon, shrimp, and tuna comprising 73% ($48,000), 22% ($28,000), 5% ($3,000) of the total catch, respectively.
### Commercial Traffic

#### Comparative Statement of Traffic
(Short Tons)

<table>
<thead>
<tr>
<th>Year</th>
<th>Tons</th>
<th>Year</th>
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<tbody>
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<td>86,000</td>
</tr>
<tr>
<td>1959</td>
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<td>1968</td>
<td>94,000</td>
</tr>
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<td>1960</td>
<td>Less Than 500</td>
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<td>1962</td>
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<tr>
<td>1966</td>
<td>53,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Fresh fish and shellfish constituted 87% of the tonnage that was handled by the Port of Gold Beach in 1974.

### Gold Beach Port Facility Inventory

The private and port dock facilities combined offer about 270 moorage spaces. In addition to boating facilities the port operates the airport (for light planes) which is located near the harbor area.

With the construction of the breakwater, business firms have begun negotiating for space in the port area. Proposals for a machine shop, boat-building works, and other marine oriented activities have been received by the port.
The Port of Gold Beach is represented by five commissioners who are elected for terms of four years. Their function is to develop port plans and to handle the port district finances.

The Gold Beach commission employs a port administrator, a budget officer, a secretary, and part-time dock help.

The port levies an annual property tax of approximately $1.08 per $1,000 assessed valuation. Annual tax revenues are about $53,000. This tax rate has been relatively high within the last few years due to the development of a new boat basin in the estuary. Due to this construction, the largest expenses in the Port of Gold Beach's budget have been for moorage and harbor jetty development.

Port Planning

In February 1973, the Land and Water Development Plan for the Port of Gold Beach was developed. The plan contains a description of the area which offers information on opportunities and constraints for the development of the area. It also contains a long range development plan that tends to be idealistic.

Current development activities arise through single purpose planning by the port manager and commissioners. The following is a brief list of the port development goals.
1. Modification of the north jetty to provide a spillway that will allow excess winter-time flood waters to run off more rapidly.

2. Modification of the entrance to correct hazardous navigation conditions. These hazardous bar conditions are caused by several factors including heavy sediment loads brought down by the river, and littoral drift of sediment by longshore currents.

3. Widening and deepening the existing federal channel and turning basin in the boat basin.

4. Expansion of boat moorage and related facilities including dredging and shoreline-straightening in the existing boat basin. This increase would bring the moorage capacity of the boat basin up to 100 commercial and 250 private spaces.

5. A new disposal system for the fish processing plant outfall. The large particles will be collected by straining through a 40 mesh screen, the remaining liquid will be dumped into the estuary during the rainy season and discharged into the ocean during the dry season.

Water quality problems exist in the boat basin due to poor flushing. The port is currently taking water samples to determine the present quality of the water. The data will be analyzed and appropriate actions taken to correct the situation. Two possible solutions to the problem will be:
1. Remove moorage spaces to reduce the amount of pollution that is discharged into the boat basin.

2. Construct a water inlet at the east end of the boat basin to allow water from the Rogue River to circulate through the boat basin, thereby increasing the flushing action.

Role of the Port

The major task of the Port of Gold Beach Commission is the economic development of the district through recreational and commercial fishing developments. The commission has also shown an interest in increasing the barge activity.
PORT OF NEHALEM

P.O. Box
Nehalem, Oregon 97131

Phone: 368-5258

Commissioners:

Andrew Lagler, President
Eugene E. Stockton, Vice President
Edmund F. Lyster, Secretary
William Dart, Treasurer
Stanley Jud, Commissioner

Term Expires

June 30, 1977
June 30, 1977
June 30, 1977
June 30, 1977
June 30, 1977

Staff:

Edmund F. Lyster, Secretary
Mrs. Eleanor Wimber, Assistant Secretary

Port Commission Meeting: Fourth Wednesday of Every Month
PORT OF NEHALEM

Overview

The Nehalem Port District covers the northern portion of Tillamook County. The largest town in the port district is Wheeler, (population 262). The county is developing a land-use plan but the Port District does not have nor is it planning a comprehensive port development plan.

There is not any shipping traffic due in a large part to the condition of the port. The channel shifts constantly and the jetties are mostly underwater at high tide. The removal of snags from the channel is accomplished on a self-help basis by local people with the assistance of the port. In 1963, a request to obtain assistance from the Corps of Engineers failed.

The controlling depth at the bar is approximately five feet during the dry summer months and 7 feet during wet winter months.

Recreational Fisheries

From March 1 to October 31, 1971, there were 2,427 boat, shore, and tideflat users interviewed on the Nehalem Estuary by the Oregon Department of Fish and Wildlife.

Of the anglers interviewed, approximately 85% were residents of Oregon living outside of Tillamook County, 8% were Tillamook County
residents, and 7% were from out-to-state. The large numbers of out of county residents using this area reflects the popularity of this bay with Portland area residents.

The people interviewed expended a total of 20,300 resource user trips (17,000 boat, 2,900 shore, and 400 tideflat) on the Nehalem estuary. The 20,300 user trips represented 65,100 man hours of effort (57,000 boat, 7,600 shore, 500 tideflat). The peak months of activity for the boat, shore, and tideflat fisheries was September, followed by August and July in that order.

Sport fisheries harvested 30,700 marine animals (18,000 crabs, 7,400 fish, 4,400 clams, and 900 shrimp) which is valued at approximately $6,475 (crabs-$5,200, fish-$600, clams-$550, shrimp-$125). Dungeness crab comprised 84% of the boat anglers' total catch. Fish were the principal animals harvested by shore anglers and represented 84% of their total take. Pacific staghorn sculpin and shiner shrimp were the only species caught by tideflat users. A comparison of the catches revealed that boat anglers harvested 20,500 or 67% of the total animals taken. Shore anglers and tideflat users harvested 4,900 and 5,300 marine animals, respectively. Peak months of catch for the boat, shore, and tideflat fisheries were (1) July, (2) August, and (3) July. Combining all fisheries, the principal catch of all species was in July.

Commercial landings of food fish caught in the Nehalem Estuary in 1971 totaled 1,375 pounds ($390 dockside price). Littleneck clams,
salmon, and groundfish constituted 43% ($200), 38% ($160), and 19% ($30) of the catch respectively. In 1974, the total catch was 1,203 pounds ($884 dockside price), a 12.5% decrease in total pounds. Salmon and little-neck clams were 27% ($166) and 73% ($718) of the total 1974 catch, respectively.

Commercial Traffic

No commercial shipping was reported.

Nehalem Port Facilities Inventory

The port is not involved directly in recreational activities. A joint state-county launching ramp is located below Nehalem with a state launching ramp located at Nehalem Bay State Park. There are ten privately operated docks in the area that can berth 525 craft. Privately owned dry land storage can accommodate about 130 boats. During peak weekend usage there may be as many as 700 to 800 boats on the water.

Port Organizational Structure

The Nehalem Port District has five port commissioners who are elected for a five-year term. These commissioners formulate policy in relation to the Port's duties and manage the Port's finances.

The only other staff member that is retained by the port is a part-time secretary.
The Port levies an annual property tax of $.10 per $1,000 of assessed property valuation on property within the Nehalem Port District. Tax revenue for the Port is approximately $4,000.

Channel maintenance, including the removal of snags, requires the major portion of the budget.

**Port Planning**

Planning for port development is minimal. Projects are generated at port meetings to satisfy current needs with planning for the future nonexistent.

The port does not have any current projects. The commissioners would like to see the jetties repaired and the channel dredged by the Corps of Engineers. Possibly the port district would then construct a public dock facility and try to attract the commercial fishing industry.

**Role of the Port**

The port's current major role is the removal of snags in the estuary and channel maintenance. If jetty work becomes a reality, it will then develop recreational facilities.
PORT OF NEWPORT

P.O. Box 921
Newport, Oregon 97365

Commissioners:

Gene Bateman, President
Julius Johnson, First Vice President
Richard O. Christensen, Second Vice Pres.
Mohava Niemi, Secretary
Don C. Swift, Treasurer

Phone:

Term Expires

June 30, 1977
June 30, 1977
June 30, 1977
June 30, 1977
June 30, 1977

Staff:

Fred H. Weakley, Manager
Barbara R. Schwantes, Office Manager
J. Christopher Minor, Legal Counsel
Kurt Lengwenus, Harbormaster

Estuary Size: 3,910 Acres

Tidelands Area: 1,353 Acres

Port Commission Meeting: Second Monday of Each Month
PORT OF NEWPORT

Overview

The Port of Newport District covers the central coastal and much of the northern part of Lincoln County. Its facilities are headquartered in Newport (population 5,192). All port activities are compatible with land-use plans and zones. County zoning was completed in 1971.

Recreational boaters come mainly from the Willamette Valley. Commercial fishing boats come from all west coast states and British Columbia with as many as 400 to 500 commercial transients using the port in a season. Boats based in the port district normally operate up to 14-15 miles out to sea, but some may go out 20 miles for salmon.

The harbor at Newport, located on Yaquina Bay, has a channel and turning basin authorized to a depth of 40 feet.

Resource Use

In the Yaquina Bay Estuary, there were 12,048 boat, shore, tideflat, and skin diver resource users interviewed from October 1, 1970 through September 30, 1971. The study area extended from the seaward ends of the two jetties upstream 12 miles to Toledo.

Approximately 75% of the anglers interviewed were residents of
Oregon living outside of Lincoln County, 18% were Lincoln County residents, and 7% were out-of-state residents.

Recreational Fisheries

A total of 100,700 resource user trips (27,600 boat, 47,300 shore, 24,300 tideflat, and 1,500 diver) were made on Yaquina Bay during the study. The 100,700 user trips represented 217,800 man hours of effort (93,600 boat, 86,000 shore, 36,300 tideflat, and 1,900 diver). August was the peak month for the boat, shore, and skin diving fisheries while July was the peak month for the tideflat fishery. Combining all fisheries, July was the peak month of activity.

The four fisheries harvested 626,500 animals (402,400 clams, 133,600 fish, 53,100 crabs, 37,400 miscellaneous invertebrates) valued at $103,500. Principal species harvested by boat anglers were Dungeness crab, Pacific herring and starry flounder. Fish represented 87% of the shore anglers' catch, with Pacific herring, starry flounder, and northern anchovy the main species landed. Cockle, soft shell, and gaper clams were the principal species dug by the tideflat users.

Comparing the catch for all four fisheries revealed that tideflat users harvested 440,400 or 70% of the animals taken. Boat and shore anglers and skin divers harvested 94,000, 90,400, and 1,700 marine animals, respectively. The four fisheries combined catch peaked in July.
Commercial Fisheries

Commercial landing of marine food fish and shellfish caught in Yaquina Bay in 1971 totaled 67,968 pounds valued at $97,121 (dockside price). Oysters and anchovies comprised 58% and 17% of the landings, respectively.

The total landing of food fish in 1971 was 12,447,184 pounds valued at $2,692,000. Shrimp, crabs, groundfish, and salmon comprised 29%, 29%, 19%, and 14% of the total 1971 take, respectively. Various fish species comprised the remaining 9%.

By 1974, the total take of food fish increased by 5% to 13,038,546 pounds valued at $4,996,000 (dockside price). Shrimp, salmon, ground-fish, and tuna comprised 34%, 21%, 20% and 18% of this catch, respectively. Various fish species comprised the remaining 7%.

Newport Port Facility Inventory

Within the Yaquina Bay Estuary there are five marinas that have a combined capacity of 658 moorage slips. Of these, 190 are for permanent use with the peak use being 600. Also within the estuary there is a berth to accommodate deep draft vessels.
Yaquina Bay and Harbor

Section Included: Entrance and Bay to town of Yaquina, a distance of 4.5 miles

Controlling Depth: 40’ at entrance thence 30’ to and in the turning basin and 9’ in the small boat basin.

Project Depth: 40’ through entrance channel, 30’ from end of entrance channel to McLean Point, 30’ in turning basin, and 18’ from turning basin to town of Yaquina.

Commercial Traffic

Comparative Statement of Traffic (Short Tons)

<table>
<thead>
<tr>
<th>Year</th>
<th>Vessel Traffic (Tons)</th>
<th>Rafted Tons</th>
<th>Total Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965</td>
<td>482,011</td>
<td>10,547</td>
<td>492,558</td>
</tr>
<tr>
<td>1966</td>
<td>286,327</td>
<td>0</td>
<td>286,327</td>
</tr>
<tr>
<td>1967</td>
<td>349,619</td>
<td>0</td>
<td>349,619</td>
</tr>
<tr>
<td>1968</td>
<td>202,450</td>
<td>2,852</td>
<td>205,302</td>
</tr>
<tr>
<td>1969</td>
<td>132,600</td>
<td>808</td>
<td>133,408</td>
</tr>
<tr>
<td>1970</td>
<td>121,228</td>
<td>0</td>
<td>121,228</td>
</tr>
<tr>
<td>1971</td>
<td>522,616</td>
<td>0</td>
<td>522,616</td>
</tr>
<tr>
<td>1972</td>
<td>278,205</td>
<td>0</td>
<td>278,205</td>
</tr>
<tr>
<td>1973</td>
<td>206,504</td>
<td>0</td>
<td>206,504</td>
</tr>
<tr>
<td>1974</td>
<td>219,334</td>
<td>171,146</td>
<td>390,480</td>
</tr>
</tbody>
</table>

Of the 390,480 short tons handled by the Port of Newport in 1974, 44%, 30% and 19% of it was rafted logs, logs, and lumber, respectively.
Port Organization Structure

The Port of Newport Commission consists of five port commissioners elected for four year terms. The commissioners formulate policy in relation to the Port's duties and powers as designated by Oregon Statutes. The Port staff, hired by the commissioners, includes a port manager, a secretary, a harbor master, a nightwatchman and additional summer help.

The Port levies an annual property tax of approximately $.29 per $1,000 of assessed valuation. Taxes produce approximately $17,000 annually for the Port.

Marina operations usually are the largest cost of the Port of Newport.

Port Planning

The Port commissioners and Port manager developed a limited plan for future port development. The plans include the following activities.

1. Completion of the liquified natural gas plant at McLean Point on the north side of the bay.

2. Completion of a pile wharf at pier #3 on the north side of the bay.

3. Development of a commercial fishing boat basin at pier #3 on the north side of the bay.
4. Development of a boat harbor just seaward of the Ore-Aqua facilities on the south side of the bay.

5. Development of shore side facilities, such as a motel and convention center, at the proposed boat basin seaward of the Ore-Aqua facilities.

Role of the Port

As expressed by the port commissioners, the Port of Newport intends to play a balanced role in developing industry and recreation. The major trend of development in the area presently is toward tourism and recreation.
PORT OF PORT ORFORD

P. O. Box 145
Port Orford, Oregon 97456
Phone: 332-7121

Commissioners: Term expires:

Paul Peterson, President June 30, 1977
Phillip Wright, Vice President June 30, 1977
Dale Reeves, Secretary June 30, 1977
Bill Vincent, Treasurer June 30, 1977
John Donford, Commissioner June 30, 1977

Staff:

Wilber Green, Budget Officer

Estuary size and tidelands area can not be computed because the port does not have an estuary.

Port Commission Meeting: Not scheduled on a regular basis.
PORT OF PORT ORFORD

Overview

The Port District covers much of the Northern third of Curry County. Its headquarters are located outside the city limits of Port Orford (population 1,037). However, the port receives city protection.

Commercial fishing boats are drawn from most west coast ports. Sport fishermen are primarily drawn from California and nearby inland areas, although some come from Washington State.

A breakwater, which was constructed in 1968 by the Army Corps of Engineers, appears to have caused shoaling in the boat basin area. A turning basin of 16 feet is authorized for the area. The port is currently having the shoaling problem corrected.

Resource Use

Recreational Fisheries

Port Orford does not have an estuary by which public fishing use can be ascertained.

Commercial Fisheries

Commercial food fish landing in 1971 totaled 1,776,296 pounds. Of this, groundfish, crabs, shrimp, and salmon comprised 31%, 26%, 24% and 19% of the total 1971 catch, respectively.
The total monetary value of the 1971 catch was $385,000 (dockside price).

The 1974 commercial catch of food fish was 1,324,921 pounds valued at $639,000 (fishermen's price), with shrimp and salmon comprising 37% and 36% of the total poundage, respectively.

**Commercial Traffic**

**Comparative Statement of Traffic**

(Short Tons)

<table>
<thead>
<tr>
<th>Year</th>
<th>Tons</th>
<th>Year</th>
<th>Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1958</td>
<td>1,000</td>
<td>1967</td>
<td>-</td>
</tr>
<tr>
<td>1959</td>
<td>3,000</td>
<td>1968</td>
<td>-</td>
</tr>
<tr>
<td>1960</td>
<td>Less Than 500</td>
<td>1969</td>
<td>-</td>
</tr>
<tr>
<td>1961</td>
<td>10,000</td>
<td>1970</td>
<td>-</td>
</tr>
<tr>
<td>1962</td>
<td>37,000</td>
<td>1971</td>
<td>-</td>
</tr>
<tr>
<td>1963</td>
<td>64,000</td>
<td>1972</td>
<td>-</td>
</tr>
<tr>
<td>1964</td>
<td>15,000</td>
<td>1973</td>
<td>-</td>
</tr>
<tr>
<td>1965</td>
<td>-</td>
<td>1974</td>
<td>548</td>
</tr>
<tr>
<td>1966</td>
<td>-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

One hundred percent of the 548 tons handled by the Port of Port Orford in 1974 was fresh fish and shellfish.

**Port Organization Structure**

The Port of Port Orford has five port commissioners who are elected for four year terms. They are responsible for developing the port area and managing port finances.

The port commission employs a dock manager, a budget officer,
and some part-time help.

The port levies an annual property tax of approximately $0.35 per $1,000 assessed valuation producing approximately $6,000 for the port. The port maintains a contingency fund for emergency help. The largest expenses are incurred by the operation of the dock facilities.

**Port Planning**

The development of the Port of Port Orford is initiated by the port commissioners. The port lacks a comprehensive development plan and relies on single purpose planning with a set of goals by which to develop the port. The goals are listed below.

1. Construction of a companion breakwater which, with the existing single breakwater, will protect the harbor from shoaling and wave action.
2. Establishment of a small boat basin, launching facilities, parking, and other shoreside support facilities.
3. Dredging and maintenance of a navigation channel not less than 16 feet deep at mean lower low water.
4. Enlargement of the existing turning basin to accommodate proposed development of moorage facilities.

**Current State of Development**

The Corps of Engineers is preparing plans for the maintenance of
the Port Orford navigation project. The plan calls for dredging a larger area to depths varying from 10 feet to 20 feet below mean lower low water.

Role of the Port

The major role of the port commission will be in attracting industry that will harvest or process sea products. The commission hopes to attract timber and tourist industries, but sees ocean oriented industries as one that will create a seasonal balance with the other industries.
PORT OF SIUSLAW

P.O. Box 1220
Florence, Oregon 97439

Phone: 997-2027

Commissioners: Term Expires
Herbert C. Sauter, President June 30, 1977
Noland J. Huntington, Vice President June 30, 1977
Wayne G. Gage, Vice President June 30, 1977
Wilbur E. Ternyik, Secretary June 30, 1977
David D. Rankin, Treasurer June 30, 1977

Staff:
Paul L. Coyne, General Manager
James E. Gray, Harbor Master
Kenneth K. Campbell, Maintenance
Nicholson & Clark, Legal Counsel
Joseph A. English, Accountant
Thomas J. Murray & Associates, Port Consultant
Thomas J. Dowd, Financial Consultant

Estuary Size: 1,590 Acres
Tidelands Area: 775 Acres

Port Commission Meeting: First Wednesday of Each Month
PORT OF SIUSLAW

Overview

The Siuslaw Port District covers most of the coastal portion of Lane County. Its headquarters are located at Florence (population 2,246). Both recreational and maritime docks are located in the City of Florence. Lane County land use and city zoning plans determine various developmental possibilities within the Siuslaw Estuary.

Commercial fishing boats are drawn mostly from U.S. west coast ports. Day boats work out to approximately ten miles offshore, while larger boats follow the fish into California waters. Most sport boaters come from the Willamette Valley with most coming from the Eugene-Springfield area. Lumber and wood products shipped from the port originate from throughout all of Lane County and as far away as Washington and California.

Resource Use

In the Siuslaw Estuary, there were 5,031 boat, shore, and tide-flat users interviewed, from March 1 through October 31, 1971. Approximately 70% of the anglers interviewed were residents of Oregon living outside of Lane County, 21% were from Lane County and 9% were out-of-state residents.
Recreational Fisheries

A total of 32,600 resource user trips (4,200 boat, 22,500 shore, and 5,900 tideflat) were made on the Siuslaw Estuary during the study period. The 32,600 user trips represented 83,400 man hours of effort (13,100 boat, 61,600 shore, and 8,700 tideflat). Peak activity occurred in August for the boat fishery and July for the shore and tideflat fisheries. July was the peak month for all fisheries combined.

Anglers of the three fisheries harvested 184,400 animals (143,100 clams, 33,600 fish, 7,000 crabs, and 700 miscellaneous invertebrates) valued at $17,800 dockside price. Dungeness crab comprised 66% of the boat anglers' total catch which has a dockside value of $4,700. Fish (valued at $10,700) made up 92% of the shore anglers' catch, redtail surfperch was the main species caught. Softshell clams valued at approximately $4,700 comprised 89% of the tideflat users' total take. Comparison of the catch for all three fisheries revealed that tideflat users harvested 143,800 or 78% of the total animals taken. Boat and shore anglers caught 6,400 and 34,000 animals, respectively.

Commercial Fisheries

Commercial landings of food fish caught in the estuary in 1971 totaled 13,372 pounds valued at $2,160 (dockside price). Shad, Dungeness crab and other miscellaneous species constituted 62%, 32%
and 6% of the total take, respectively.

The total food fish landings in the Siuslaw Estuary were 298,374 pounds for the year 1971, valued at $91,000 (dockside price). Salmon, crabs and other miscellaneous species represented 47%, 45% and 8% of the 1971 catch, respectively. In 1974, the total food fish catch was 261,035 pounds valued at $142,000, a 13% decrease from 1971 in the total amount of pounds caught. Of the 261,035 pounds caught, tuna and salmon accounted for 49% and 38% of the take, respectively.

**Siuslaw Port Facility Inventory**

The Port of Siuslaw has three berths that handle the 350 tug-and-barge combinations that stop at Florence. Two port docks provide space for 300 small craft including 85 permanently moored spaces. The facility may be used by over 600 boats on a peak weekend. Six private docks provide 550 berths with 100 permanently moored craft. Over 650 boats may use these facilities on a peak weekend.
Siuslaw River

Project Depth: 18 feet at the entrance of the estuary,
16 feet in the interior for a length of 5 miles.

Commercial Traffic

Comparative Statement of Traffic
(Short Tons)

<table>
<thead>
<tr>
<th>Year</th>
<th>Tons</th>
<th>Year</th>
<th>Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1958</td>
<td>371,000</td>
<td>1967</td>
<td>244,000</td>
</tr>
<tr>
<td>1959</td>
<td>296,000</td>
<td>1968</td>
<td>164,000</td>
</tr>
<tr>
<td>1960</td>
<td>289,000</td>
<td>1969</td>
<td>126,000</td>
</tr>
<tr>
<td>1961</td>
<td>225,000</td>
<td>1970</td>
<td>96,000</td>
</tr>
<tr>
<td>1962</td>
<td>367,000</td>
<td>1971</td>
<td>101,000</td>
</tr>
<tr>
<td>1963</td>
<td>259,000</td>
<td>1972</td>
<td>144,000</td>
</tr>
<tr>
<td>1964</td>
<td>168,000</td>
<td>1973</td>
<td>117,000</td>
</tr>
<tr>
<td>1965</td>
<td>129,000</td>
<td>1974</td>
<td>224,000</td>
</tr>
<tr>
<td>1966</td>
<td>98,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Of the 224,000 short tons that was shipped out of the Port of Siuslaw in 1974, rafted logs and lumber made up 80% and 18% of these exports, respectively.
Port Organization Structure

The Port of Siuslaw District is represented by five port commissioners elected for four year terms. The commissioners formulate policy in relation to the Port's duties and powers (under authority of Oregon Statutes).

The commissioners hire other port personnel including the port manager, secretary, moorage attendant, and two laborers for general purpose maintenance.

The port levies an annual tax of approximately $.36 per $1,000 on property with an assessed valuation of approximately $94,000,000. The tax produces about $34,000 in tax revenue. Currently dock operations are the major expenditure in the budget.

Port Planning

The port does not have a comprehensive plan for port development to go along with the Siuslaw Land Use Plan Recommendations. The single purpose planning originates with the port commissioners and manager.

The Port of Siuslaw has two projects that are in the early planning stage and are listed below.

1. The feasibility study of developing a new boat basin for the area. (Specific plans have not been formulated).
2. Jetty improvements at mouth of the Siuslaw River.

(Authorized by Congress in October 1976).

Role of the Port

The major goal of the Siuslaw Port District is to develop recreational and commercial fishing.
PORT OF TILLAMOOK BAY

P. O. Box 113
Tillamook, Oregon 97141

Phone: 842-2413

Commissioners:

Peter Betschart, President
J. B. Dyer, V. President and Secretary
E. L. Cornett, Treasurer
George Smith, Commissioner
Hugh Shaw, Commissioner

Term Expires

June 30, 1977

Staff:

Eckard V. Toy, Manager
E. R. Millan, Administrative Secretary
McMinimee and Kaufman, Attorneys
Frank R. Griffiths, Accountants
Joanne Brennan, Office Clerk

Estuary Size: 8,480 Acres
Tidelands Area: 4,163 Acres

Port Commission Meeting: Second Monday of Each Month
PORT OF TILLAMOOK BAY

Overview

The Port of Tillamook Bay District covers the central portion of Tillamook County. Port facilities are located at Tillamook (population 3,968).

Veneer is brought in by truck and rail from as far away as Roseburg and Eugene. Hardwood for decking and for special orders comes in from the Philippines. Inland shipments are made mainly by truck and rail. Rail service in the port district is provided by a branch line of the Southern Pacific from the Portland area.

Continual silting restricts use of the bay above Garibaldi. The port district is attempting to justify channel dredging. At present the channel terminates at Garibaldi, ten miles below Tillamook.

Since the Tillamook Bay Port District and the Bay City Port District are situated on the same estuary many of their activities and much of their planning are coordinated.

Resource Use

In the Tillamook Bay area, there were 15,700 boat and shore anglers, and tidestretch users interviewed from March 1 through October 31, 1971.
Nearly three-fourths (73%) of the anglers interviewed were residents of the state outside of Tillamook County, 21% were Tillamook County residents and 6% were nonresidents. This is a high proportion of state residents and reflects the heavy usage of Portland on this estuary.

Recreational Fisheries

In Tillamook Bay, 66,500 resource user trips (24,500 boat, 17,500 shore, and 24,500 tideflat) were made in the 8,480 acre estuary during the study period. The 66,500 user trips represent 172,300 man hours of effort (98,500 boat, 35,600 shore, and 38,200 tideflat).

Anglers harvested 667,000 marine animals valued at $38,900 dockside price (20,400 fish, 32,800 crabs, and 613,800 clams). Crabs valued at $11,300 dockside price comprised 93% of the boat anglers' total catch. Dungeness crab was the principal species caught. Fish were the principal marine animals harvested by shore anglers and represented 98% of the total take having a dockside value of $1,600. Pile perch was the principal species caught, followed by kelp, greenling and shiner perch. Clams having a dockside value of about $26,000, comprised 94% of the tideflat users' total take. Cockle and littleneck clams were the principal species dug making up 39% and 38% for the harvest, respectively.
Comparison of the catch for all three fisheries revealed that tideflat users harvested 650,600 or 92\% of the total marine animals taken. Boat and shore anglers caught 35,000 and 18,000 marine animals, respectively. Combining all fisheries, July was the principal month of catch.

Commercial Fisheries

Commercial landings of marine food fish and shellfish caught in Tillamook Bay in 1971 totaled 343,130 pounds valued at $300,000 (dockside price). Oysters and dungeness crab constituted 70\% and 27\%. The total take brought into the Tillamook Bay Estuary in 1971 was 3,115,941 pounds.

The 1974 catch of 3,455,369 pounds valued at $1,418,000 was 11\% over 1971. Shrimp and salmon comprised 68\% and 13\% of the total 1974 catch, respectively.

Commercial Traffic

No tonnage is shipped over the bar up to the Port of Tillamook Bay.

Port Organization Structure

The Tillamook Port District has five port commissioners elected for four year terms. They participate in port planning and manage the finances of the port district.
The port employs a staff that includes a manager, secretary, and three regular employees (when needed). Backup crews for railroad maintenance are provided by the Southern Pacific Railroad Company.

The port levies an annual property tax of approximately $0.13 per $1,000 assessed valuation. Tax revenues are about $14,000 per year. The major expenditure in the Port of Tillamook's budget has been emergency improvements and storm damage repairs.

Port Planning

The Tillamook port manager and commissioners are the people that originate port planning. In January of 1975, they developed in cooperation with the Bay City Port District, a Port District Master Plan for port development. But, as port personnel have stated, the desires and attitudes of people change. With new personnel representing the port from year to year, the port planners feel compelled to make their own recommendations. Therefore, in essence, the Tillamook Port Planners rely on single purpose planning with a set of general goals for port development.

The following is a list of those goals.

1. A 1,500 foot extension of the south jetty to make it the same length as the north jetty.

2. Expansion of the existing small boat basin at Garibaldi.

3. Development and maintenance of a side channel in Miami
Cove and development of moorage, launching and support facilities.

4. Development of a main multiple-purpose channel up to 16 feet deep and 150 feet wide from Garibaldi to the head of navigation on the Tillamook River.

5. Development and maintenance of a recreational boating and flood relief channel not less than 6 feet deep and 80 feet wide off the main bay channel into the Kilches River with a sediment settling basin 9 feet deep, 400 feet wide and 800 feet long (a sediment settling basin is to collect river sediments which would otherwise deposit in the channel and river mouth suffocating clam and oyster populations and causing other biological damage).

6. Establishment of a nature sanctuary or preserve on the tide and mud flat area between the Kilches and Wilson River channels.

7. Establishment of a pedestrian fishing pier on the restored Dick Point Dike.

8. Development of a sediment settling basin 20 feet deep, and 600 feet wide and 2,000 feet long at the confluence of the Tillamook and Trask Rivers.

9. Development and maintenance of a recreational boating and flood relief channel, straightening Hoquarten Slough into the City of Tillamook not less than 6 feet deep and 80 feet
wide, and connecting it to the sediment settling basin at the confluence of the Tillamook and Trask Rivers.

10. Development of boat basins, launching and related shore side facilities in the upper bay as demand dictates.

Two major problems exist with the above mentioned goals. The first is to gain approval by the various State and Federal Conservation agencies to conduct such activities. The second problem is to raise the necessary funds with which to implement such activities.

**Role of the Port**

The port commission's major role will be to assist industrial development in the area while keeping up with the recreational desires of citizens.
PORT OF TOLEDO

P.O. Box "F"
Toledo, Oregon 97391         Phone: 336-2257

Commissioners:                Term Expires

Alfred J. Jones, President    June 30, 1977
Elmer Price, Vice President   June 30, 1977
H. Ross Miller, Treasurer     June 30, 1977
Sidney H. Neal, Secretary     June 30, 1977
Donald W. Knapp, Commissioner June 30, 1977

Staff:

Paul B. Osterlund, Attorney   
Alex Thompson, Dockmaster     
Bill McCluskey, Port Clerk    

Estuary Size:  Nonestuarine
Tidelanda Area: Nonestuarine

Port Commission Meeting: Second Wednesday of Each Month
PORT OF TOLEDO

Overview

The Port of Toledo District covers the central third of Lincoln County. Its headquarters are located in Toledo (population 2,818). County zoning was completed in 1971. The port dock in the City of Toledo is zoned for industrial use.

Timber shipments come mainly from the local area. Recreational boaters come from the Willamette Valley and the local area. Steelhead fishing in the Toledo area is a strong attraction for valley residents.

The port is located on the Yaquina River which has an authorized channel depth of 10 feet up to Toledo. Silting has reduced the channel depth to a controlling depth of 8 feet.

Resource Use

Due to the location of Toledo, public and commercial fishing activities are negligible.
Commercial Traffic

Comparative Statement of Traffic
(Short Tons)

<table>
<thead>
<tr>
<th>Year</th>
<th>Tons</th>
<th>Year</th>
<th>Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1958</td>
<td>587,000</td>
<td>1967</td>
<td>532,000</td>
</tr>
<tr>
<td>1959</td>
<td>576,000</td>
<td>1968</td>
<td>417,000</td>
</tr>
<tr>
<td>1960</td>
<td>715,000</td>
<td>1969</td>
<td>358,000</td>
</tr>
<tr>
<td>1961</td>
<td>849,000</td>
<td>1970</td>
<td>272,000</td>
</tr>
<tr>
<td>1962</td>
<td>650,000</td>
<td>1971</td>
<td>250,000</td>
</tr>
<tr>
<td>1963</td>
<td>588,000</td>
<td>1972</td>
<td>235,000</td>
</tr>
<tr>
<td>1964</td>
<td>584,000</td>
<td>1973</td>
<td>240,259</td>
</tr>
<tr>
<td>1965</td>
<td>660,000</td>
<td>1974</td>
<td>242,000</td>
</tr>
<tr>
<td>1966</td>
<td>509,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Logs and rafted lumber constituted 71% and 21% of the total tonnage shipped through the Port of Toledo in 1974.

Port Facility Inventory

The port has one pier 224 feet long used by six ocean-going barges for loading lumber. The public dock has space for eight boats. Private docks in the area provide for an additional 50 berths.

Port Organization Structure

The Port of Toledo district has five commissioners elected for
four-year terms. The commissioner formulate policy in relation to the Port's duties and powers in keeping with Oregon Statutes.

The commissioners employ a small staff consisting of one part-time dock manager and other part-time help. The major work is done by jobbing it out.

The port district levies an annual property tax which has an assessed valuation of $112,700,000. The tax rate is approximately $.09 per $1,000 valuation, producing about $10,000 in taxes.

The major cost to the port district are dock operations and river channel maintenance.

Port Planning

The Toledo port commissioners originate port planning. They lack a comprehensive development plan and rely on single purpose planning to develop the port.

The following are the general goals for port development:

1. Deepening and maintaining the existing federally authorized 10-foot navigation channel in the Yaquina Bay to mile 14 at Toledo.

2. Expansion of the present boat moorage facilities at the Port of Toledo Dock.

3. Development of a water oriented industrial park in Toledo on land owned by the port.
4. Construction of a marine oriented warehouse facility and machine shop at the Port of Toledo Dock.

5. Establishment of a regular program for debris removal in Yaquina River to the head of light-draft navigation at Elk City.

**Role of the Port**

The commercial dock operation and recreational development will remain the major role of the port with channel maintenance also important.
PORT OF UMPQUA

Reedsport, Oregon 97467 Phone: 271-3636

Commissioners: Term Expires

Lester Thompson, President June 30, 1977
William Karcher, Vice President June 30, 1977
William V. Humphreys, Secretary June 30, 1977
Donald Bower, Treasurer June 30, 1977
Harry D. Dillon, Commissioner June 30, 1977

Staff:

Gaylord Vaughn, Executive Secretary
William Collver, Port Attorney
Thomas J. Murray, Consultant

Estuary Size: 5,712 Acres
Tidelands Area: 1,531 Acres

Port Commission Meeting: First Thursday of Each Month
PORT OF UMPQUA

Overview

The Umpqua Port District covers most of the coastal area of Douglas County. Its headquarters are located in Reedsport (population 4,039). Port activities are compatible with the Reedsport city zoning ordinances.

Fishing interests are represented by commercial fishing boats which are drawn from all points on the west coast of the United States. Recreational boaters are drawn from California and Washington. The Oregon boaters and sport fishermen come largely from the Willamette Valley and Roseburg areas.

Resource Use

From March 1 through October 31, 1971, 3,985 boat, shore and tideflat users were interviewed on the Umpqua Estuary from the seaward ends of the two jetties upstream 12 miles to the confluence of the Smith River.

Over half (55%) of the anglers interviewed were residents of Oregon living outside of Douglas County. Thirty percent of the resource users were local residents and 15% were not residents of Oregon. This is a high proportion of state residents compared to Coos Bay where
only 32% of the anglers were county residents. The large number of out of county residents using the estuary can be attributed to the lack of nearby population centers.

Recreational Fisheries

In the Umpqua Estuary, there were 59,500 resource user trips (7,600 boat, 48,700 shore, and 3,200 tideflat) were made in the estuary during the study. The 59,500 user trips represent 142,100 man hours of effort (28,600 boat, 107,600 shore, and 5,900 tideflat). The peak month of activity was July for the shore and tideflat fishery, and August for the boat fishery. July was the peak month of activity for the combined fisheries.

Anglers harvested 195,700 marine animals valued at $98,000 (107,600 fish-$86,000, 84,000 clams-$10,500, 4,100 crabs-$1,500).

Striped bass was the principle species caught by the boat anglers with Pacific tomcod, shiner perch, and redtail surfperch the prominent species caught by the shore anglers.

Softshell clams comprised 100% of the tideflat users total take.

Comparing the catch for all three fisheries revealed that shore anglers harvested 107,800 or 55% of the total animals taken. Tideflat users harvested 84,600 clams and caught 3,900 marine animals. The peak month of catch was July for the shore and tideflat fishery. July was also the principle month of catch for the combined fishery.
Commercial Fisheries

Commercial landing of marine food fish and shellfish caught in the Umpqua Estuary in 1971 totaled 333,376 pounds valued at $60,791 (dockside price) according to Oregon Fish and Wildlife landing statistics. This represented 5% of the total poundage (6,592,210 pounds) of edible food fish brought into the estuary in 1971 which had a dockside value of $978,000. By 1974, the total catch decreased by 13% to 5,756,854 pounds with a dockside value of $1,591,000.

Umpqua River

Section Included: Entrance to Reedsport, a distance of about 12 miles. (Same section and statistics apply to Port of Umpqua.)

Controlling Depth: 16 feet on the bar, 21 feet from entrance to mile 3, 20 feet mile 3 to 8, 15 feet mile 8 to 12 and 22 feet in the turning basin.

Project Depth: Entrance 26 feet and 22 feet from mouth to Reedsport with a turning basin at Reedsport; A side channel and mooring and turning basin 12 feet deep at Winchester Bay; A channel 22 feet deep with a turning basin at Gardiner.
### Commercial Traffic

**Comparative Statement of Traffic**
(Short Tons)

<table>
<thead>
<tr>
<th>Year</th>
<th>Vessel Traffic</th>
<th>Rafted Tons</th>
<th>Total Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965</td>
<td>359,314</td>
<td>277,529</td>
<td>636,843</td>
</tr>
<tr>
<td>1966</td>
<td>491,081</td>
<td>568,655</td>
<td>1,059,736</td>
</tr>
<tr>
<td>1967</td>
<td>780,081</td>
<td>654,227</td>
<td>1,434,760</td>
</tr>
<tr>
<td>1968</td>
<td>303,806</td>
<td>605,835</td>
<td>909,641</td>
</tr>
<tr>
<td>1969</td>
<td>291,037</td>
<td>274,011</td>
<td>565,048</td>
</tr>
<tr>
<td>1970</td>
<td>324,698</td>
<td>160,131</td>
<td>484,829</td>
</tr>
<tr>
<td>1971</td>
<td>415,091</td>
<td>153,687</td>
<td>568,778</td>
</tr>
<tr>
<td>1972</td>
<td>452,666</td>
<td>139,304</td>
<td>608,066</td>
</tr>
<tr>
<td>1973</td>
<td>468,762</td>
<td>139,304</td>
<td>608,066</td>
</tr>
<tr>
<td>1974</td>
<td>609,448</td>
<td>237,660</td>
<td>847,108</td>
</tr>
</tbody>
</table>

Of the 847,108 short tons shipped through the Umpqua River Estuary in 1974, sand, gravel and crushed rock comprised 62% of the tons shipped while rafted logs comprised 28%. Various cargoes comprised the remaining 12%.
Port Facility Inventory

The shipping terminal located in the Umpqua Port District consists of one pier and one berth. These facilities combined have 500 lineal feet for the transfer of cargo.

The Umpqua Estuary has the largest small boat basin complex on the Oregon Coast. The existing 858 publicly owned moorage slips in Salmon Harbor at Winchester Bay are being increased to 1,685 moorage slips.

Port Organization Structure

The Umpqua Port District has five port managers who are elected for a term of four years. The commissioners formulate policy in relation to the Port's duties under Oregon statutes.

The commissioners employ a full-time staff that includes an assistant secretary, and additional staff at the Salmon Harbor Boat Basin.

The port levies an annual property tax of approximately $.30 per $1,000 assessed property valuation. The levy produces about $44,000 annually in tax revenue for the port district.

The major part of the port district budget is used for the operation and maintenance of the Salmon Harbor development.
Port Planning

Port planning is initiated by the port commissioners. Their method involves the planning of a project to satisfy an immediate need.

The following are the commissioners goals for developing the port.

1. Seaward extension of the existing training jetty at the mouth of the Umpqua River to join the outer end of the existing south jetty.

2. Rehabilitation of the landward end of the training jetty to protect against erosion behind the jetty.

3. Restoration of the existing north jetty.

4. Completion of the west bay of Salmon Harbor in accordance with the existing Master Plan and the development of additional vehicle and trailer parking.

5. Expansion of the existing small boat launching facility at Gardiner and additional parking facilities.

6. Use the 200 acre port-owned Steamboat Island for the dumping of dredge spoils from the maintenance dredging of the navigation channels. Then the development of the island for industrial/commercial use.

7. Development of moorage, launching, park and related shore-side facilities in the Providence Creek area, on the lower
reaches of the Smith River and on the Unpqua River between Reedsport and Scottsburg.

**Extent of Present Projects**

1. On March 17, 1976, the U.S. Fish and Wildlife Service approved the intermittent maintenance dredging for the years 1976, 1977, and 1978, in the Umpqua River. The dredging will be done during February through November from the entrance to river mile 11, and the controlling depth will be 26 feet at the bar and 22 feet in the inner channel.

2. On March 24, 1976 the U.S. Fish and Wildlife Service approved the maintenance dredging at river mile 9.8 near Gardiner. The project will remove approximately 1,500 cubic yards of material to provide continual access to the moorage facilities and boat ramp. The controlling depth will be -10 feet M.L.L.W.

3. On November 29, 1976, the U.S. Fish and Wildlife Service approved the rehabilitation project of the North Umpqua Jetty. The project will include the placement of approximately 300,000 tons of rock on the north jetty and the excavation of 33,000 cubic yards at river mile 1.2 to provide access for barges to reach a landing on the east side of the north spit.
Role of the Port

The Umpqua Port Commission sees its role in the future to be the industrial development of the area. (Financing will be done through revenue bonds and possibly economic development funds might be available.)
SUMMARY

Port Planning Summary

The planning bodies for the Oregon Coastal Port Districts are composed of port commissioners and administrators or harbor masters, if the position exists. The planning process is affected by many variables, such as the financing of projects, local geography, and the demands made on the port by public and commercial users.

Single purpose planning or comprehensive planning are two ways of classifying the method of port planning. The difference in the two systems is that in single purpose planning the immediate need dictates a course of action while in comprehensive planning, activities and facilities are planned to a varying degree before the need arises.

Comprehensive planning is more easily implemented by having a bigger cash flow as in the case with the larger and more developed ports, like Astoria, Coos Bay, and Newport.

Smaller ports that lack immediate financial funding, like Nehalem and Alsea, tend to neglect the idea of comprehensive planning. This erroneous action is exemplified by the Brookings and Bandon port districts. They have a limited funding capacity, but through motivation and perseverance, of the local planning bodies, and recognition of the
exploitable resources, they were able to develop a limited comprehensive plan for developing the port. They will never be able to compete with the larger ports like Coos Bay and Astoria, but they will be able to improve the port economically.

Port Structure Summary

The twenty-three Oregon Port Districts are divided into three regions, the Mid-Columbian Ports, the Lower Columbian Ports, and the Coastal Ports.

Each of the ports on the Oregon coast are represented by five elected port commissioners. Their terms of office formerly varied from three to five years.

In 1975, the Oregon State Legislature passed House Bill #2021 which will realign public elections and terms of office. By this bill, the present port commissioners, whose term of office expires before or after June 30, 1977, will serve up to the before mentioned date.

At this time, all five port commissioner positions will come up for reelection. The newly elected officials will then draw lots with three of the commissioners serving a four year term and two serving a two year term.

When the initial two year term is completed, an election will be held and the two newly elected commissioners will serve a four year
term. The purpose of drawing lots is to stagger the terms of office so that the port cannot be represented by five new port commissioners at one time.

Oregon State statutes require the port districts to perform certain activities. For example, they must hold monthly public port meetings to discuss the business of the port. They must file a port budget with the Oregon Department of Revenue and a resume of the yearly port activity, with the State of Oregon's Attorney General's Office. Quarterly meetings, with the other coastal ports, are also held through the Department of Economic Development. The purpose is to keep the port districts informed as to mutual problems and interests.

**Commercial Shipping Summary**

To summarize shipping on the Oregon Coast, it is evident that Coos Bay is the dominant port in shipping activity. For instance, in 1972, more tons of commerce were handled in Coos Bay than in all the rest of the shipping locations combined. If the commerce from the Coos and Millicoma Rivers shipping locations is added, this dominance would be even greater. However, this would be somewhat misleading since the freight on the Coos and Millicoma Rivers is basically rafted logs, many of which are again counted in the Coos Bay figures as domestic imports.
Although Coos Bay handled over three times as much total tonnage as Astoria in 1972, Astoria shipped a much higher percentage of high value to weight commodities, such as fish and fish products.

Even considering this cautionary note, it is clear that Coos Bay is, by far, the major shipping location on the Coast with Astoria second. The amount of commerce handled by Coos Bay and Astoria (and the other shipping locations that are included in their respective port districts) has been steadily increasing over time. This is demonstrated by the graph in figure 1. Note that Coos Bay and Astoria have displayed increases since 1958, while the other locations generally have not.

In breaking down these other locations, as to the amount shipped, the results show that only Tillamook Bay (ports of Bay City and Tillamook Bay), Chetco River (Port of Brookings), and Rogue River (Port of Gold Beach) showed increasing trends from 1958 to 1972. Possible reasons for these trends will be discussed later.

Coastal ports are predominately export-oriented, with only Coos Bay and Astoria showing consistently significant volumes of imports. Even with these two ports, imports are still small relative to exports. For instance, in 1972 the rates of tons exported to tons imported for Coos Bay was 3.2, and for Astoria, 6.9. The main imports are petroleum commodities in Coos Bay and pulp and paper in Astoria.

The major commodity handled by coastal ports is wood in various forms (e.g., chips, rafted logs, lumber and plywood). Other
Total Shipping Activity

Coos Bay, Astoria and All Others

A graph showing the total shipping activity in thousands of tons versus years from 1958 to 1972 for Astoria, Coos Bay, and All Others.

Figure 1
commodities exported or imported in significant volume are fish and other food products, sand and gravel, pulp and paper, and petroleum. If all products that are classified as lumber and wood products are added together, they would represent 83% of all coastal-shipped commodities for 1972.

Wood products have been and continue to be the major commodity for coastal ports. The composition of the total amount of wood products has changed over the past fifteen years, with shipments of lumber decreasing and shipments of other wood products, mainly wood chips, increasing. The largest single commodity in all years, however, is rafted logs. Although rafted logs are mostly internal port transfers, they still represent jobs and shipping activity.

All of the ports of Lincoln County (Yaquina River, Siletz River, Alsea Bay, Depoe Bay, and Yaquina Bay and Harbor) have experienced decreased levels of shipping since 1958. These decreases have been due to decreased shipping of rafted logs and lumber, which appears to correspond with the decreases in the output of wood products in Lincoln County.

The bulk of the increase in total shipments handled in Coos County (mainly the Port of Coos Bay) and Clatsop County (Port of Astoria) has been due to increases in shipments of wood products. Along with increases in its standard shipping commodity (logs) since 1967 Coos Bay has, since 1967, been exporting a significant volume of wood chips. By 1972, 2,823 thousand short tons of wood chips were exported.
Astoria has also been increasing its shipments of wood products, however, there has also been an increase in the shipment of non-wood commodities, mainly wheat and its by-products. In 1972, 256 thousand short tons of wheat, and 34 thousand short tons of wheat flour and semolina were shipped from Astoria.

One other major export commodity not yet mentioned is sand and gravel. All counties except Curry have shown some export of sand and gravel over the past fifteen years. The major exporter of sand and gravel in the coastal zone is Douglas County (Port of Umpqua) which exported 414 thousand short tons in 1972.

The relationship of employment to shipping activity for the coast is shown in Figure 2.

As with shipping, Coos Bay is first in employment, following by Clatsop County. Although unlike shipping activity, water transportation employment has been decreasing in Coos County. The decreased employment from 1958 to 1967, with increased output, is largely due to productivity gains in water transportation. With the advent of large exports of wood chips commencing in 1967, both employment and total tons shipped have shown significant gains. In this case, the increase in employment due to more shipping has been more than enough to offset the decreases in employment due to increased productivity. A similar result apparently is occurring in Clatsop County and perhaps others. The net effect of these forces has been a slight downward trend
Shipping Activity and Employment in Water Transportation for the Coast

Figure 2

Shipping "---
Employment "---

(Employment is considered basic employment i.e., a primary industry)

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in water transportation employment since 1958, although in 1973 employment was 10% higher than in 1972.

To summarize, the total tonnage handled by coastal ports has been increasing since 1958. Employment, on the other hand, has been gradually decreasing. The bulk of coastal shipping is also extremely concentrated. In 1972, two ports (Coos Bay and Astoria) accounted for 83% of the total coastal shipping activity and five ports (Coos Bay, Astoria, Umpqua, Newport and Toledo) accounted for 95%. The remaining 5% was spread over the other ten ports. Those ten ports did ship 590,000 tons in 1972, mostly by barge. In 1974, the ports of Coos Bay, Astoria, Umpqua, Newport, and Toledo accounted for 90% of the total coastal shipping, while Astoria and Coos Bay accounted for 80% of the total coastal shipping.