COOS BAY ESTUARY PLAN

AN ELEMENT OF THE COOS COUNTY COMPREHENSIVE PLAN

Coos County
Coquille, Oregon

As adopted by the Coos County Board of Commissioners on May 16, 1975

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PURPOSE

This plan is the first part, or element, of the Coos County Comprehensive Land Use Plan. It seeks to provide a complete use and management plan for the water and intertidal areas of the bay. As such, it categorizes future uses of these areas and land uses which are closely associated with and produce direct impacts on such areas. It also provides policies to guide management and planning of land activities which may affect the estuary. The specific planning of other activities and uses in adjacent areas will be provided in the complete Coos County Comprehensive Plan.

This plan was developed in recognition of the critical role estuary uses play in the well being of Coos County. The estuary, a fragile marine environment, must also be developed to accommodate the county's economic and transportation needs as a port. Choices to balance these competing concerns in the estuary are limited. Therefore, the estuary is planned first to resolve these critical issues and, thereby, become a basis upon which to make further planning decisions in the comprehensive plan.

I. INTRODUCTION

A. Location and Geography

The Coos Bay Estuary is located in Coos County, Oregon, about 200 miles south of the Columbia River and about 445 miles north of San Francisco Bay. The estuary is defined as a semi-enclosed body of water which has free connection with the open ocean in which ocean water is measurably diluted with fresh water derived from upland drainage. The drainage area of Coos Bay is about 820 square miles and is rugged, steep slopes rising abruptly from valley floors covered with coniferous forests.

Primary tributaries to Coos Bay are the Coos and Millicoma Rivers, Haynes and Kentuck Inlets and Catching, Isthmus, Pony and South Sloughs which contribute minor tributary inflow.

Coos Bay, a drowned river mouth, is a relatively recent geologic feature which was created by local downwarping of marine sedimentary bedrock. Changes in sea level relative to the land since the Wisconsin stage of the Ice Age have flooded many coastal valleys including Coos Bay. Estuaries such as Coos Bay have been created within these drowned valleys as they fill in with sediments.

At mean high tide the Coos Bay embayment, including South Slough, contains about 10,500 acres. This acreage does not include tidal portions of Coos River, Catching,

Isthmus and Coalbank Sloughs or other tributaries. At mean low water the bay's water surface is about 5,000 acres. Portions of the Coos Bay Estuary have been removed from the tidal prism through man-made diking and filling. Approximately 1,500 acres have been removed by filling; these areas include the Eastside Airport, portions of downtown Coos Bay, North Bend waterfront, North Point at North Bend, North Bend Airport and Pony Village. Another 2,000 acres, mostly along Coos River, Kentuck, Larson and Haynes Sloughs, have been removed by diking for agricultural purposes.

B. Climate

The climate of the Oregon Coast and Coos Bay is that of the mid-latitude marine with warm summers and moist cool winters. At North Bend precipitation averages about 62 inches annually with rainfall measurement greater than 100 inches occuring at headwater locations.

Temperature extremes vary from 16 to 100 degrees with January average daily temperatures about 45 degrees and July average temperatures about 59 degrees. The formation of North Spit is due, in large part, to the prevailing summer northwest wind and long-shore wave deposits combined with low water flow in the summer dry periods resulting in the formation of a sandbar which has moved progressively southward. Manmade jetties at the entrance and sand dune stabilization have allowed sand and silt to accumulate on the North Spit and add to its westerly border; the same is true of the South Jetty area.

C. Development

Present population is centered in the three incorporated cities of Coos Bay (13,466 population); North Bend (8,553); Eastside (1,331 population). The population of the unincorporated areas immediately around the bay has been estimated to be approximately 8,848, with the largest concentration in Charleston-Barview (3,296) and Bunker Hill (3,052). Between 1960 and 1970 population in Charleston-Barview and Bunker Hill had declined substantially. Residential growth is occuring at a rapid rate in the North Bay-Glasgow to Hauser area. Population and economic growth is also expanding into the center of the peninsula, chiefly in the North Bend/Empire areas where relatively level terrain enhances building structures.

The major highway transportation route is Highway 101 as the major north-south corridor following the east

bank of North Slough, crossing Haynes Inlet on a causeway, crossing Coos Bay on McCullough Bridge between Glasgow and North Bend, following the east side of the peninsula through North Bend, Coos Bay, and Bunker Hill and following the west shore of Isthmus Slough southward. Transportation to other parts of Oregon and adjacent states is primarily along this highway. Other roads serving the estuarine region are: East Bay Drive, connecting Highway 101 and Glasgow, Kentuck, Cooston and the Chandler Bridge at Coos River and Eastside; the Cape Arago State Highway from North Bend through the Empire District and Charleston to the beaches. All of these routes are developed with both residential and commercial services along the right-of way. Newmark Street in North Bend and Ocean Boulevard in Coos Bay are major east-west peninsula routes.

D. Economics

The Coos Curry Douglas Economic Improvement Association (CCDEIA) has developed an "Overall Economic Development Plan" for the Tri-County area. This report contains most of the basis for economic considerations of the committee within the estuarine region.

The major economic base for the area is the forest products industry; roughly 68% of all employment depends directly upon the forest products industry and additional 1.5 jobs (low estimate) are generated for every forest products job. The CCDEIA report indicates that there has been a decline in employment in agriculture but not nearly so great within these areas as for the State of Oregon or the United States as a whole. Dairy products, particularly cheese making, sheep and wool, and beef production are the three primary agricultural practices within the estuarine region.

The Coos Bay Estuarine region is ideally suited to the harvesting and processing of fish and shellfish that inhabit not only the estuary but offshore waters of the Pacific Ocean. Major fish and shellfish types that are presently being utilized commercially are Albacore Tuna, various ground fish, crab, shrimp and salmon. Both the CCDEIA report and information from Oregon State University indicates that there is a great potential for expanded marine fisheries facilities and their subsequent economic impact in the bay area.

Recreation and the tourist industry play a major role in the economy of the bay area in overnight accommodations and services to tourists, sportsmen and hunters.

II. INVENTORY OF THE AREA

Many inventories of the natural and economic systems of the bay area have been completed. This process has utilized such inventories as an integral part of formulating this plan. Appropriate inventories are annotated in the bibliography of this report for reference.

III. PROBLEMS

A. Problem Areas for Study

The following are identified as problems or areas of specific interest in the development of this estuary use plan:

a) Development

b) Log Storage
Water storage; land storage; accessibility; dust problem

c) Jurisdiction problems
North Spit, USA; BLM; Port; County; Mill; etc.

d) Depth of channel

e) Spoil disposal

f) Sedimentation in bay

g) Life cycle in tidelands

h) Peripheral transportation
(land transportation)

i) Water supplies
domestic/industrial

j) Access to bay

k) Sewage-effluent disposal

l) Tideland flow alternation

m) Fishing/shellfish in bay

n) Acreage/front requirements
demanded use of waterfront and adjacent land

o) Lack of economic diversification

p) Boat storage

q) Lack of overall co-ordination

B. Problem Statements

The following statements are problems associated with

current land and water use in the Coos Bay Estuary:

1. Sedimentation from upland areas which:

    a) is hastened by poor land practices
    b) has a direct impact on fish, shellfish, aquatic birds and by smothering spawning beds, damaging gills, and eliminating shelter
    c) increases the need for and cost of dredging to maintain navigational channels.

2. Erosion from poor land development practices at the perimeter of the estuary.

3. Adequate locations and criteria for disposal of dredged (spoil) material.

4. Present cost-benefit ratio structures for dredging programs.

5. Filling of estuarine areas without thorough study and planning which has:

    a) significantly reduced the volume of the estuary
    b) reduced tidal flushing
    c) changed the physical characteristics of the shoreline
    d) destroyed large acreages of productive marshlands and tidelands
    e) changed land values and land use patterns in the urban areas.

6. Lack of comprehensive plan and zoning criteria to:

    a) determine priorities and type of shorelines uses
    b) monitor and evaluate various watershed practices and management techniques.

7. Some log storage and handling practices that are incompatible with the maintenance of water quality standards.

8. Alternatives to water transport of logs which could prove more costly in terms of economics, environment, and resource considerations.

9. Lack of disposal sites for wood debris from

channels and marshlands that have accumulated over the years.

10. Disposal and runoff of domestic sewage into the bay.

11. Inadequate treatment and disposal of industrial wastes including fish processing wastes.

12. Reduced vegetative cover at estuarine perimeter.

13. Rapid, large volume discharge of fresh water from storm sewers and other urbanized sources.

14. Poor water quality in small sloughs with limited tidal flushing and low fresh water input.

15. Gradual destruction or alteration of nesting, feeding, and resting areas for fish, shellfish, aquatic birds and mammals.

16. Changes in world and regional shipping methods and increased ship dimensions that in turn reflect on the Port of Coos Bay and conflict with the physical capabilities of the estuary.

17. Lack of storage and back up areas for cargoes and ship services.

18. Poor transportation routes, in all modes, to the interior regions of Oregon.

19. Inadequate transportation facilities within the estuarine region including too narrow ship passages in the present Southern Pacific Railroad bridge.

20. Lack of adequate data and information regarding hydraulic actions within the estuary.

21. Inadequate fishing industry facilities, space and capital to expand this industry to its potential.

IV. GOALS

Based on these problems, this plan establishes the following goals as policies or recommendations for the planning, use and management of the estuary:

1. Reduce sedimentation from upland watershed areas through strict adherence to and enforcement of the Forest Practices Act.

2. Establish land development standards at the estuarine perimeter to prevent excessive ground cover and soil removal.

3. Designate dredge spoils locations, priorities and criteria for the disposal at each site.

4. Base cost/benefit ratio structures for dredging programs on a wider range of environmental, social and economic considerations.

5. Limit, to the areas indicated in this plan, estuarine filling that will further reduce the volume of the estuary, significantly alter the character and shape of the shoreline, destroy marshlands and tide flats or significantly change land use in an area.

6. Adopt a comprehensive plan for the County, incorporating this plan and any subsequent revision based on that plan, as an element.

7. Implement log storage recommendations based on present and future log storage studies.

8. Permit burning in certain designated disposal sites for wood debris from channel and marshlands primarily in the East Bay and Isthmus Slough area; and such designation of areas must consider air pollution, fire hazards and keeping noxious residue out of the water.

9. Prevent disposal and runoff of domestic sewage into the bay through adequate set-back from the water in areas where soil is suitable for septic systems, prohibition of septic systems where soils are not suitable and installation of community treatment systems where practical.

10. Develop adequate treatment and disposal of

industrial wastes and encourage the development of a fish processing plant of technological capabilities to utilize fish wastes from existing fish processing plants.

11. As practicable, encourage retarded runoff of fresh water from urbanized sources by ponding and routing of storm sewer and paved area waters to natural creek drainage and by protecting natural vegetative coverage along natural drainage courses.

12. Limit uses of poorly flushed slough areas to natural production and nondisruptive recreational use.

13. Prevent destruction or alteration of significant natural nesting, feeding and resting areas for fish, shellfish, aquatic birds and mammals.

14. Recognize the physical limitations of the estuary to handle increased ship dimensions and plan for development within physical capabilities.

15. Designate suitable storage and back up areas to serve both existing and proposed industrial areas around the bay.

16. Begin an objective feasibility study to implement new highway routes through the Bay Area; such studies should include matrix/computer analysis of traffic patterns, land use plans, land use capabilities, social factors, construction costs and methods, acquisition costs, watershed disruptions, soil and geological analysis and other identifiable factors.

17. Begin an objective study to gather data and information regarding hydraulic action within the estuary.

18. Encourage the location of new fishing industry facilities by designating adequate space, channel areas and transportation routes to serve and expand this industry.

V. ESTUARY USE PLAN

A. Land/Water Use Categories

The Plan uses the following use categories in designating areas appropriate for each general type of use:

1. Land Categories

Since this plan is intended to plan the use of the estuary itself, only those land uses that may produce significant impacts on or are dependent upon the water itself are specifically included. Other types of specific land uses adjacent to the estuary will be planned in the rest of the Coos County Land Use Plan.

a. Marine Industrial: Water-related industrial uses that specifically require location on the waterfront including but not limited to timber processing, boat building or repair and fisheries processing. Related site development and activities such as dock construction, bulkheading, dredging, dredge spoiling, warehousing, storage and marine transport facilities would be permitted as appropriate.

b. Industrial: Manufacturing, fabricating, repairing, and related activities which may produce substantial impact on estuarine concerns and which may require location near the estuary due to a lack of suitable industrial sites with the necessary public facilities and transportation access in other areas. These activities may be in conjunction with water related activities.

c. Marine Commercial: Water-related commercial uses that utilize for business purposes location on the waterfront, including but not limited to warehouses, storage or dock facilities for rock products, petroleum products or timber products, boat facilities, fuel or service facilities, marinas, or other non

manufacturing commercial facilities, and related uses. Bulkheading, maintenance dredging, dredge spoiling may be permitted as appropriate.

d. Recreation: Areas for general or specialized public recreation use such as camping, picnicing, hiking, fishing, boating, clamming, and recreation oriented facilities and services.

e. Spoils Disposal: Areas where dredge spoils may be placed provided that precautions are used to prevent return of spoils to the bay and that appropriate State permits are secured. Spoils disposal may also be permitted in other upland categories. Spoils disposal may also be permitted in Industrial, Marine Industrial, and Marine Commercial, provided that such disposal is related to site improvements for those uses and any State required permit is secured. Limited spoils disposal in conjunction with and intended to improve navigation channels may be permitted.

f. Converted Areas: Areas where public benefit may be accrued through the conversion of estuarine areas to upland uses. Such conversion may be accomplished through either diking or filling as appropriate.

g. Uplands: Areas reserved for uses which bear only minor relationships to or impacts on water uses. These areas will be planned for specific uses in the Coos County Comprehensive Plan. Any such uses permitted in the Coos County Comprehensive Plan, or permitted until that plan is completed, should be restricted in any manner which would involve a change in estuary uses designated in this plan, would involve the filling or modification of estuarine areas designated in this plan, or would produce substantial indirect impacts on estuarine environments. These uses would include, but not be limited to:

1) Residential

2) Commercial

3) Upland industrial (industrial uses which do not utilize waterfront locations and do not produce adverse impacts on or have a direct relationship to the estuary)

4) Agriculture

5) Forestry and Grazing

6) Recreation, Open Space, or Natural Areas

h. Forestry and Grazing: Forested areas of particular importance to special estuarine concerns. Other forests and grazing areas would be included in the upland categories.

2. Water Use Categories

a. Marine Transport: Major shipping or navigation lanes where maintenance dredging is necessary to maintain channel depth; channel depth to be determined by traffic demands. Navigation markers, dolphins or other piling may be permitted in relation to these lanes. This category does not diminish the public's right to navigation on the surface of any other waters of Coos Bay where craft may negotiate with adequate water without dredging.

b. Marine Storage: Water areas where log rafts, vessels or other waterborne obstructions to navigation are regularly placed on either a long term or short term basis. These areas may require maintenance dredging.

c. Marine Harvest: Areas where aquaculture production of oyster, shrimp, fish, etc., may be practical and desirable for commercial harvest; structures and accessory facilities necessary for aquaculture are contemplated. General public use of these areas is not contemplated; no dredging or filling.

d. Marine Production: Tidal areas of

valuable biologic natural resources that contribute to the overall estuarine system; no filling or dredging permitted; public recreational uses permitted; certain areas may be re-evaluated for potential designation as Marine Harvest. This designation includes many small marshlands throughout the estuary which are too small to be adequately mapped on the scale presented.

e. Marshlands: Those marsh areas within the main bay and along the tributary sloughs that are vital to the organic, aesthetic and recreational integrity of the estuarine system; no filling or dredging permitted; public recreational use permitted.

B. Estuary Use Plan

The estuary use categories have been applied to the estuary on the basis of the following considerations:

1. South Slough

a. The National Estuarine Sanctuary on South Slough is protected as provided on the map. The plan recognizes the value of this area for recreation, aesthetics, natural resource production and timber harvesting compatible with the maintenance of water quality and aesthetic standards. The plan also recognizes that a method of compensation to owners of property within any protected or preserved area should be worked out at the soonest possible date.

b. The remaining or upland uses adjacent to the South Slough will be specified in the Coos County Comprehensive Plan.

c. The plan recognizes that there is great potential in South Slough for aqua-culture. The large areas that are platted as oyster beds and areas that would be suitable for aqua-culture be Marine Harvest. The balance of the water area

south of Joe Ney Slough is retained in Marine Production to continue to provide nutrients to the rest of the estuarine system. The designation of Marine Harvest should be viewed in general nature in recognition of many potential sites for oyster aquaculture. The designation of Marine Harvest is not intended to limit oyster production to these specific areas, but are given in general to indicate this potential in South Slough.

d. From Joe Ney Slough to the Charleston Bridge the plan recognizes the value of commercial dock facilities and establishes Marine Transport and Marine Storage areas to serve the fishing and boating industry. Joe Ney Slough is to be Marine Harvest with specific designations to recognize biological support areas necessary for aquaculture production.

f. The plan notes the large coal reserves around the South Slough Basin which have been highly productive in the past and recommends that existing or potential coal mining sites be designated and protected against encroaching development which would preclude the use of the coal resources. These resources have been analysed in Geology and Coal Resources of the Coos Bay Quadrangle, Oregon by John E. Allen and Ewart M. Baldwin, Oregon State Department of Geology and Mineral Industries, 1944. Maps and information included in that report should be incorporated into the County Comprehensive Land Use Plan.

2. Charleston Harbor

a. The plan recognizes the value of the Charleston Harbor for water related commercial and industrial uses, and designates appropriate areas immediately adjacent to the estuary for these uses, leaving remaining areas for designation in the Coos County Comprehensive Plan. Since Marine Commercial and Marine Industrial are interrelated and similar, in this area, the specific designations should

be viewed with flexibility. Marine Commercial designation in this area does not permit filling of intertidal areas.

b. The plan recognizes the value of shallow water areas on the east side of the channel that should be reserved as Marine Production.

c. The sand spit immediately north of the Small Boat Basin be used as a passive, light Recreational use area.

3. Barview to Coos Bay

   a. The plan recognizes the importance of large water areas for natural marine production that contributes to the estuarine system and the public recreational enjoyment. These areas are designated as Marine Production.

   b. The plan recognizes the value of the Sitka Dock area as an industrial site. This land area is designated on the map as Marine Industrial. Water areas adjacent to this area out to the channel, as designated, is to be Marine Transport to allow free access from the channel to storage and dock areas. The plan recommends that efforts be made to locate a high-technology fish processing plant with additional scientific research facilities, at the Sitka Dock site. Site development of the Sitka Dock area should retain the existing natural buffer between the site and other upland areas.

4. North Spit

   a. The Plan recognizes the value of the southern end of North Spit for its open dune areas, marshes and wildfowl habitat. The plan recommends that this area be retained in a primitive state with no improved roads except for the areas designated as Recreation on private land in areas of stabilized, forested sand dunes and sheltered from northwest wind; this Recreation category contemplates use of the area for resort type facilities.

   b. The plan recognizes the value of North Spit as a potential dredge spoils area and recommends that dredge spoil areas 2-B, both Short Range and Long Range Disposal Areas, (Stevens, Thompson and Runyan) be used for such purposes.

   c. The plan recognizes the value of large water areas and tideflat areas for natural marine production and specifies that these areas be retained in Marine Production.

5. North Spit - Jordan Cove

   a. The Plan recognizes the value of the North Spit-Jordan Cove areas as potential industrial expansion sites and specifies that areas designated on the map be Marine Industrial with adjacent water areas as Marine Transport. This area is close to a deep water channel, has large, flat backup areas and is close to transportation routes of rail, highway and airline. Priorities for development should be from existing areas at Jordan Cove expanding westward as need dictates. Future expansion of the industrial area designated on the map should be considered if the need develops, since this general area is one of the most appropriate areas of the region for industrial location.

   b. Stevens, Thompson & Runyan, Dredge Spoils Report designates several dredge spoils locations in this area. These are Sites 4-W, 5-W, 6-W, 9-S and 10-S, Short Range sites, and areas 4-W, Long Range sites. The Oregon State Game Commission and Oregon State Fish Commission have submitted their review of this Dredge Spoils Report to the Port of Coos Bay. The plan takes note of the fact that the Game Commission and Fish Commission play a significant role in dredge and fill permit application approval. The plan recommends that areas with proper precautions; area 4-W be moved south and west to avoid filling marsh areas adjacent to the Menasha Lagoon; and recommends that areas 9-S and 10-S (Jordan Cove) not be used until further economic and environmental studies have been made designating the need for the fill.

6. North Slough

   a. The area around the intersection of North Slough and Highway 101 and Hauser Depot Road and Highway 101 is to be used for Industrial purposes. This area is close to rail, highway and water transportation and has good flat backup areas for industrial and commercial site location.

b. The North Slough channel from Hauser to the main bay is to be Marine Transport with water areas on either side of the channel to be Marine Production; upland areas between the railroad tracks and Highway 101 should be retained in Forest and Open uses. These designations will allow the utilization of the waterway for navigation and transport but will protect the marshlands and adjacent uplands and their valuable contributions to the overall estuarine system. In addition, these designations recognize the great scenic value of the marshlands and sand dune areas along North Slough.

c. The plan recognizes the value of large tidal areas immediately north and south of the Menasha causeway for aquaculture. The plan recommends that these areas be retained as Marine Harvest.

7. Haynes Inlet

a. The natural channel area from Highway 101 northeast to the tidegate at Haynes Inlet is Marine Transport.

b. The plan recognizes the value of large tidal areas north of the aforementioned channel as potential aquaculture areas and these areas are designated Marine Harvest.

c. The balance of water areas in Haynes Inlet are retained in Marine Production for the valuable contributions to the estuarine system.

d. The areas on and immediately adjacent to the Humbert Boat Works on the south side of Haynes Inlet are designated Marine Industrial due to the value of boat building and boat repair services to the character and economy of the region.

8. Glasgow - East Bay

a. The plan recognizes the importance of historic natural channels to commerce, navigation and industry and designates

these channel areas as Marine Transport.

b. The plan recognizes the potential for aquaculture in the large tidal areas along the East Bay and these areas are designated as Marine Harvest.

c. The plan recognizes the value and contribution to the overall estuarine system of marshlands and tidelands in the middle and East Bay designates these areas as Marine Production and Marshlands.

d. Areas for log storage are necessary for maintenance of economic stability of the timber industry. These areas are designated Marine Storage.

e. The existing burning sites on the extreme southern end of Bull Island are to be continued for burning of wood debris swept from Coos River and adjoining channels. Use of Bull Island as dredge spoils site should only be done if no viable alternative exists to implement the dredge project of the Port of Coos Bay.

f. The plan recognizes the value of large, flat upland areas known as the Christiansen Ranch for dredge spoils disposal and for potential industrial sites. This area is designated as Spoils Disposal, in conformance with Stevens, Thompson and Runyan, Dredge Spoils Report areas 19-W and 20-W. The area is also designated Industrial, in recognition of the need for suitable industrial sites near the estuary and near the commercial forest lands of the County.

g. Pierce Point is designated as upland, reserving specific Upland designation for the comprehensive plan. However, in recognition of the potential utility of this site for industrial purposes, this designation should be reconsidered if a specific industrial use for the site is proposed, which would require a water location or impact on the estuary, and is suitable for this site and its limitations.

h. Marine Industrial is designated at the mouth of Kentuck Creek to facilitate only the storage and loading of rock products. Likewise, water areas between East Bay Drive and Kentuck Channel are designated Marine Transport to facilitate handling and transportation of these rock products. These designations recognize the need to provide water transportation for the use of this resource and avoid adverse impacts that would be created by truck transport, both in terms of energy consumption and congestion.

9. Eastside (Isthmus Slough to Catching Inlet)

(Since this is an element of the Coos County Land use Plan, and the County has no authority to plan within incorporated areas, this plan only recommends uses to the cities involved as a part of the county's authority to coordinate land use plans.)

a. The plan recognizes the value of water areas fronting the City of Eastside along Isthmus Slough and the Coos River Channel and recommends that these areas be Marine Transport and Marine Storage, primarily for wood products. The plan also recommends that upland areas immediately shoreward of these water areas be Marine Industrial also primarily for forest products industry.

b. The plan recommends that dredge spoils sites 16-B, 17-B and 18-W (Stevens, Thompson & Runyan, Dredge Spoils Report) be used with care taken that fill be placed behind existing dikes.

10. Isthmus Slough and Coalbank Slough

a. Because of the key role of log storage activities in Isthmus Slough to other kinds of land/water use activities and because a study on log storage activities has been conducted through the Port of Coos Bay that provides a sound basis upon which to make decisions concerning log storage, the plan provides for the implementation of this study as it relates to Isthmus Slough.

b. The converted areas on Coalbank Slough and Isthmus Slough are reserved for agricultural use.

11. Coos Bay (East Waterfront)

(Since this is an element of the Coos County Land Use Plan, and the County has no authority to plan within incorporated areas, this plan only recommends uses to the cities involved as a part of the County's authority to coordinate land use plans.)

a. The plan recognizes the value of the channel areas and waterfront areas to the overall economy of both Coos Bay and the entire estuarine region and recommends that channel areas along the east waterfront be designated as Marine Transport.

b. The plan recommends that spoils areas 12-B and 13-B (Stevens, Thompson & Runyan, Dredge Spoils Report) be utilized as spoils disposal as long as there is no spoils flowback or channel heaving due to added weight of additional spoils and that no additional areas be added to the existing spoils locations.

c. The plan recommends Marine Storage in areas as shown for long-term storage of logs.

d. The plan recognizes the value of large tidal areas for natural biologic production and recommends that these areas be retained in Marine Production.

e. The overall City of Coos Bay Comprehensive Plan is adopted and incorporated as appropriate in this plan for the corporate limits of Coos Bay.

12. North Bend

(Since this is an element of the Coos County Land Use Plan, and the County has no authority to plan within incorporated areas, this plan only recommends uses to the cities involved as a part of the County's authority to coordinate land use plans.)

a. The plan recommends that existing channel areas along the north and east sides of the North Bend waterfront be designated Marine Transport. The plan recommends that a narrow strip of water area south of Ocean Terminals dock to the south city limits be Marine Storage for log rafts awaiting transport to ships. The plan recommends Marine Industrial usage from and including North Point to the south city limits of North Bend.

b. The plan recognizes the intention of the City of North Bend to plan for Pony Slough to be designated Marshland and Marine Commercial.

c. The plan recognizes the value of the North Bend Airport to the overall economy and transportation patterns of the area and recommends that the area immediately to the west of the North Bend Airport be designated as Spoils Disposal for runway extension.

13. Coos Bay (West Waterfront)

(Since this is an element of the Coos County Land Use Plan, and the County has no authority to plan within incorporated areas, this plan only recommeds uses to the cities involved as a part of the County's authority to coordinate land use plans.)

a. The plan recommends that existing channel areas along the westerly limits of the City of Coos Bay, and an area to the west of the Cape Arago Lumber Company mill site, as designated on the map, be Marine Transport. The plan recommends that water areas to the north of Cape Arago Lumber Company mill, for approximately 2,000 ft., be Marine Storage for log storage purposes. The plan recommends that the open tidal areas be Marine Production.

VI. FURTHER POLICIES AND RECOMMENDATIONS

A. Transportation Considerations

1. Land Transportation

a. Charleston/Libby Highway: A highway should be established between Barview and Libby to facilitate east/west travel by both residents and tourists to the area. Extreme care should be taken to establish land use controls in light of new demands that will be made upon land in the area due to the opening of a new transportation route.

b. North/South Corridors: The plan has considered the problem of traffic flow along the present Highway 101 through the estuarine region and finds problems of:

1) Heavy traffic flow, including high summer volumes of through traffic, through the urbanized business districts of Coos Bay and North Bend. This is a hinderance and hazard to both through traffic and local traffic.

2) Limitations of McCullough Bridge for expansions.

3) Limited arterial access to Empire and Barview.

4) Rapid increases in populations in the north bay area which result in heavy flows on existing two-lane highway from Hauser southward.

Several arterial routes are proposed in "broad-brush fashion" as possible solutions to existing transportation problems that would also enhance and re-enforce land use patterns projected for the area and the estuary:

1) Center Peninsula Route:

following North Slough to cross Coos Bay near the existing railroad bridge; following the east side of Pony Slough through Coos Bay and Libby; rejoining Highway 101 near Davis or Shinglehouse Slough.

2) "Low" East Bay Route: Arterial to skirt the eastshore perimeter of Coos Bay.

3) "High" East Bay Route: Arterial to cut off at Hauser, follow around North, Haynes, Larson and Kentuck Sloughs to rejoin 101 near Davis Slough staying well back from the Bay.

The plan recommends that these three alternate routes be explored for possible implementation by the State Highway Division, Department of Transportation. This study should be undertaken as soon as possible. A map outlining the rough transportation corridors is attached as Plate 2.

The plan also recognizes and incorporates the TOPICS Plan of Coos Bay, North Bend, and Coos County as a means to improve traffic circulation in the Coos Bay North Bend area.

The Coos Bay Charleston Highway should be paved and graded to wider widths and passing lanes added.

2. Water Transportation

The plan recognizes the pivotal role in the area's economy of water-borne transportation. All existing waterways should be kept open, and no bridges should be placed that will close any waterway in the estuarine region. The present Southern Pacific Railroad Bridge should be replaced with a span of adequate dimensions

to allow safe passage of ships. An adequate channel depth should be maintained for existing ship services and be developed proportionately in depth to accommodate increased ship dimensions.

B. Industrial Expansion

1. Local industry and government agencies should seek to utilize existing facilities and designated industrialized areas more efficiently before attempting further expansion and significant land use changes for industrial purposes.

2. The Jordan Cove/North Spit area, as previously outlined, should be considered as the focal point for further "heavy" industrial expansion that would be water-oriented.

3. The plan recommends that efforts be made to attract and develop a high-technology fish processing plant which would utilize waste products from the other existing fish processing plants and would incorporate research, tourist display, marketing and storage facilities.

4. The plan recognizes the need to develop improved interregional air, water and land transportation facilities in order to improve and diversify the economy of the region.

C. Recreation

1. The plan recognizes the value of North Spit as a recreation area, primarily for the residents of the Bay Area and Coos County. Its open spaces, and dunes, beach areas, marshlands and wildfowl resources all contribute significantly to the value and beauty of the area. The plan recommends that any land use changes in and along North Spit be done with a minimum disruption of the natural resources and scenic values that are valuable to the area.

2. Through its designation of a buffer around the south end of South Slough, the plan recognizes the value of this region for recreational, aesthetic, scientific and research values of benefit to all citizens of the community, the State and the Nation. Attempts should be made to secure compensation for land owners of property within this area and for public agencies to acquire these lands to be set aside for public purposes.

3. Clamming areas. The plan recognizes the value of many tidal areas in the estuary as clamming areas for general public use. The plan recommends that public agencies with responsibility in the estuary, such as the Fish Commission, Game Commission and Port Commission, undertake a publicity program to designate these areas of good clamming potential, secure access to the beach and advertise these clamming areas to the general public.

4. That all public access presently provided to the water areas of the bay shall be preserved and attempts should be made by appropriate agencies to develop these access points for boat and pedestrian use, and attempts should be made by appropriate agencies to develop these access points, and to acquire or encourage the acquisition and development of further suitable access points for public use.

D. Natural Resources

1. The plan recognizes the value of the overall estuarine system to the production of fish, shellfish, migratory fowl, shore birds and small upland animals and notes that this system effects not only the local area but large areas of the Pacific Ocean and Pacific Coast Flyway. The resources of the estuary contribute to recreation pursuits and aesthetic qualities of the area and to the economy of the estuarine region. Existing marshland and tidelands as delineated previously in this report shall be protected from further destruction. Likewise, further reduction of the tidal prism with its attendant flushing action within the bay should be avoided.

2. The plan recognizes the value of Coos Bay as an harbor for ocean going vessels and the economic impact the forest products industry has within the estuarine region. The on-going channel maintenance program, already undertaken by the Port of Coos Bay should be continued and that efforts by appropriate agencies should be continued to prevent excess erosion and sedimentation into the bay.

3. The plan recognizes the value of coal resources in and around the estuarine region and potential value to the community. The plan recommends

that these resources should be protected from incompatible development that would preclude future acquisition of these valuable resources.

E. Water Quality

1. The plan recognizes the importance of water quality to the continued productivity of the estuary. The portions of the Coos Curry Water Quality Management Plan affecting the estuary should be implemented.

2. Municipal sewage treatment outfalls into the estuary shall be limited to the three sites (North Bend Airport, Coos Bay No. 1 and Coos Bay No. 2) provided in the Coos Curry Water Quality Management Plan and new municipal systems should interconnect with these.

F. Log Storage

1. That continued use of Coos Bay Estuary be allowed for the transportation of logs.

2. That until the Eastside Airport site is developed through dredge spoiling to an adequate level for land storage of logs and sufficient energy is available for land handling of logs, water storage areas provided in this plan be available for log storage. Ultimately, this practice should be replaced by dry storage, provided that it is determined that the adverse environmental impacts of water storage are greater than such impacts of dry land storage.

3. That the gentle let down of logs at all log dumps and improved clean up practices should be required.

4. That improved logistics in log handling be encouraged.

5. That existing mills be allowed to continue feeding logs to process from water.

VII. IMPLEMENTATION

As a comprehensive estuary use plan, the implementation of this plan will require the coordination and cooperation of all involved governmental units and agencies, and the private sector.

A. Implementation of the Goals

GOAL 1

"Reduction of sedimentation from upland areas through strict adherence to and enforcement of the Forest Practices Act."

Achievement of this goal shall be the responsibility of the Oregon State Department of Forestry as provided by law.

GOAL 2

"Establish land development standards at estuarine perimeter to prevent excessive ground cover and soil removal."

The primary responsibility for this goal shall be the County, State and the cities through the development of and administration of zoning and building ordinances. Other agencies may also be involved in achieving this goal, including, the Soil Conservation Service, and various agencies of the State.

GOAL 3

"Designate dredge spoils locations, priorities and criteria for the disposal at each site."

The designation of such sites is accomplished by the adoption of this plan and any future revisions thereto. Further development and administration of this program will primarily rest with the Port of Coos Bay and the Army Corps of Engineers, and also involve the State Land Board, the Department of Environmental Quality, the cities and the County.

GOAL 4

"Base cost/benefit ratio structures for dredging programs on a wider range of environmental, social and economic considerations."

This goal is primarily a recommendation to the Army Corps of Engineers, which has responsibility for developing such studies. It also serves as guidance to other agencies and groups in developing testimony or comment on the cost/benefit studies of the Corps.

GOAL 5

"Limit to areas indicated in this plan, estuarine filling that will further reduce the volume of the estuary, significantly alter the character and shape of the shoreline, destroy marshlands and tideflats or significantly change land use in the area."

Primary responsibility for this goal rests with the State Land Board which governs such filling by permit. It also involves County and city planning and zoning, the Port of Coos Bay, the Department of Environmental Quality, and the Army Corps of Engineers.

GOAL 6

"Adopt a comprehensive plan for the County incorporating this plan and any subsequent revision based on that plan, as an element."

Responsibility for this goal rests with Coos County, and will be accomplished as follows:

1. Adoption of proposed interim zoning in early 1975.

2. Adoption of comprehensive plan by mid 1976.

GOAL 7

"Implement log storage recommendations based on present and future log storage studies,"

Implementation of this goal will require the coordination of the Port of Coos Bay, the State Land Board, the Department of Environmental Quality, and Coos County. Such implementation should be accomplished with care to avoid potentially severe adverse economic impacts in the area.

GOAL 8

"Permit burning in certain designated disposal sites

for wood debris from channel and marshlands primarily in east bay and Isthmus Slough area."

This goal, once such areas are designated, is a recommendation to the Department of Environmental Quality.

GOAL 9

"Prevent disposal and runoff of domestic sewage into the bay through adequate set back from water in areas where soil is suitable for septic systems, prohibition of septic systems where soils are not suitable and installation of community treatment systems where practicable."

The first part of this goal shall be implemented by zoning provisions, and/or the Department of Environmental Quality through septic systems permits. The development of community treatment systems is the responsibility of the cities and appropriate special purpose districts.

GOAL 10

"Develop adequate treatment and disposal of industrial wastes and encourage the development of fish processing plant of technological capabilities to utilize fish wastes from existing fish processing plants."

GOAL 11

"As practicable, retard runoff of fresh water from urbanized sources by ponding and routing of storm sewers and paved area waters to natural creek drainage courses. Local units of government are encouraged to implement this goal as provided in the Coos Curry Water Quality Management Plan and to develop appropriate treatment facilities. Implementation of this goal should be assisted by the Department of Environmental Quality and the Environmental Protection Agency."

GOAL 12

"Limit uses of poorly flushed slough areas to natural production and non-disruptive recreational use."

Implementation should be accomplished by zoning ordinances and permit procedures of State agencies.

GOAL 13

"Prevent destruction or alternation of significant natural nesting, feeding and resting areas for fish, shellfish, aquatic birds and mammals."

Implementation of this goal would be through the following, as appropriate:

1. Zoning ordinances
2. Permit procedures of state agencies
3. Management of public lands
4. Acquisition of public bodies of critical areas
5. Encouragement of private owners
6. Fish, game and wildlife management activities of Fish and Wildlife Commissions.

GOAL 14

"Recognize the physical limitations of the estuary to handle increased ship dimensions and plan for development within physical limitations."

This goal serves as advice to the Port of Coos Bay in the development of the Port.

GOAL 15

"Designate suitable storage and back up areas to serve both existing and proposed industrial areas around the bay."

Goal will be accomplished by adoption of this plan and the Coos County Comprehensive Land Use Plan.

GOAL 16

"Begin an objective feasibility study to implement new highway routes through the Bay Area...".

This goal serves as a recommendation to the State Highway Division.

GOAL 17

"Begin an objective study to gather data and information

regarding the hydraulic action within the bay."

This goal serves as a recommendation to any appropriate agency such as the Army Corps of Engineers or educational institutions.

GOAL 18

"Encourage the location of new fishing industry facilities...".

This goal serves as a statement of intent for the County and would be implemented by the planning activities of the County, the development program of the Port of Coos Bay and other economic development agencies.

B. Implementation of Estuary Use Plan

Implementation of the use portion of this plan will be accomplished in three manners:

1. For upland areas (generally those areas above the mean high tideline) included in this plan, but not in incorporated areas, use will be regulated by the Coos County Interim Zoning Ordinance until a permanent ordinance is adopted after the development and approval of the complete Coos County Comprehensive Plan.

2. For those water and intertidal areas of the plan, not in incorporated areas, implementation shall depend upon the existing permit programs of State agencies which are expected to coordinate with local plans. It is not contemplated that water areas will be zoned until the permanent zoning ordinances of the County is developed, because:

   a. Existing controls appear to be adequate to ensure conformance to the plan, at least during the interim period.

   b. Zoning will create another permit process, further confusing control authorities affecting the estuary.

   c. These areas may be established as an area of statewide critical concern, which would create another permit process that has the same purposes as a zoning ordinance.

d. Experience generated by implementing the plan through existing permit authorities will provide a clearer picture of the type of zoning needed as a permanent zoning ordinance.

In order to ensure compliance with the comprehensive plan, permit authorities should route permit applications to the Coos County Planning Commission for a formal review and comment, before award of the permit.

3. For all areas within the incorporated cities, the cities shall be responsible for implementing the plan through their zoning and other ordinances. Until the cities adopt water use planning categories and zones, the recommendations of this plan should be considered as the plan for such areas and implemented through State permit processes.

C. Implementation of Further Policies and Recommendations

1. Transportation

a. Development of the Charleston-Libby Highway and subsequent planning and zoning recommendations shall be the responsibility of Coos County.

b. The study of and implementation of North/South Corridors is recommended to the State Highway Division for implementation. Such implementation must be closely coordinated with the Coos County Planning Program.

2. Water Transportation

Water transportation recommendations are intended to be implemented by the Port of Coos Bay, the Army Corps of Engineers, and the State Department of Transportation.

3. Implementation of Industrial Expansion Policies

These policies are intended to guide future planning and zoning of the area, and to guide the development activities of the Port and other agencies, and private industry.

4. Implementation of Recreation Policies and Recommendations

These policies and recommendations are intended to guide the recreation development programs of state, local and federal agencies.

5. Implementation of Natural Resources Policies and Recommendations

   These policies and recommendations are intended to guide local planning and management programs, and the permit processes of state agencies.

6. Implementation of Water Quality Policies

   These policies recognize the Water Quality Management Program and its implementation programs.

VIII. SUMMARY

The future of the Coos Bay area lies in continued emphasis of the deep water shipping facilities for export of wood, agricultural, and other products from the region, lower Willamette, Umpqua and Rogue River Valleys and for import of products.

Industry and related land activities should be concentrated in areas where a deep channel is readily available at minimum cost to the taxpayer and to the environment, such as in the Jordan Cove area, North Point and east portion of the Coos Bay-North Bend Peninsula.

The use of estuarine waterways for storage and transportation of logs is both the least damaging to the total environment and most economical method of handling these resources. However, if this method is to be continued, better methods of handling, more consistent clean-up efforts and a determination to maintain the lowest practical inventories in water storage must be pursued. The costs of such a careful program must be borne by the users and not by the public.

The "cheapest is best" method of dredge spoils disposal is no longer valid; the Coos Bay Estuary, as a valuable resource to all citizens of the area, State and Nation, is in jeopardy if further filling of the estuary is allowed.

Finally, this plan recognizes the great public trust in estuarine planning matters and any and all land use decisions must reflect that trust.

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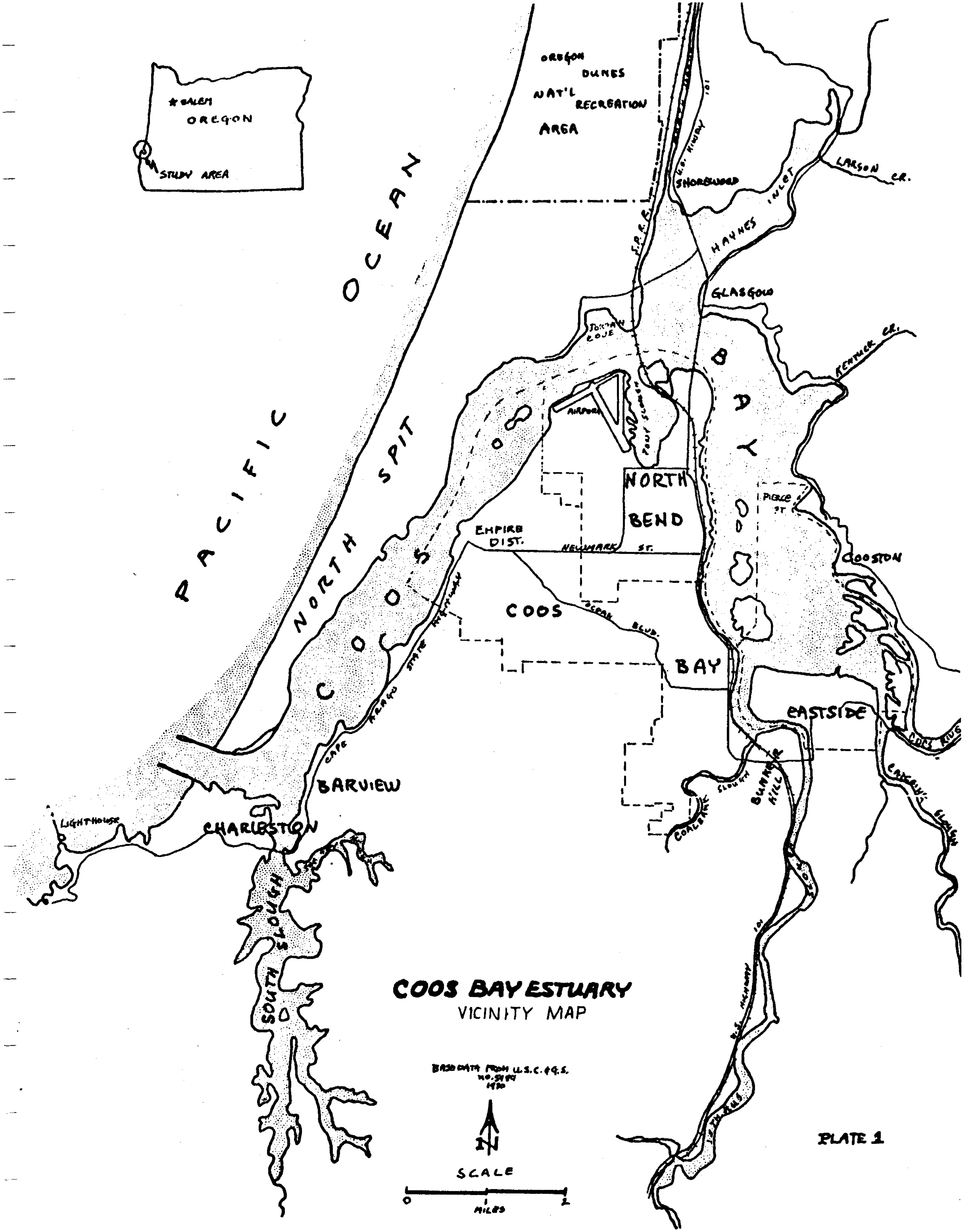
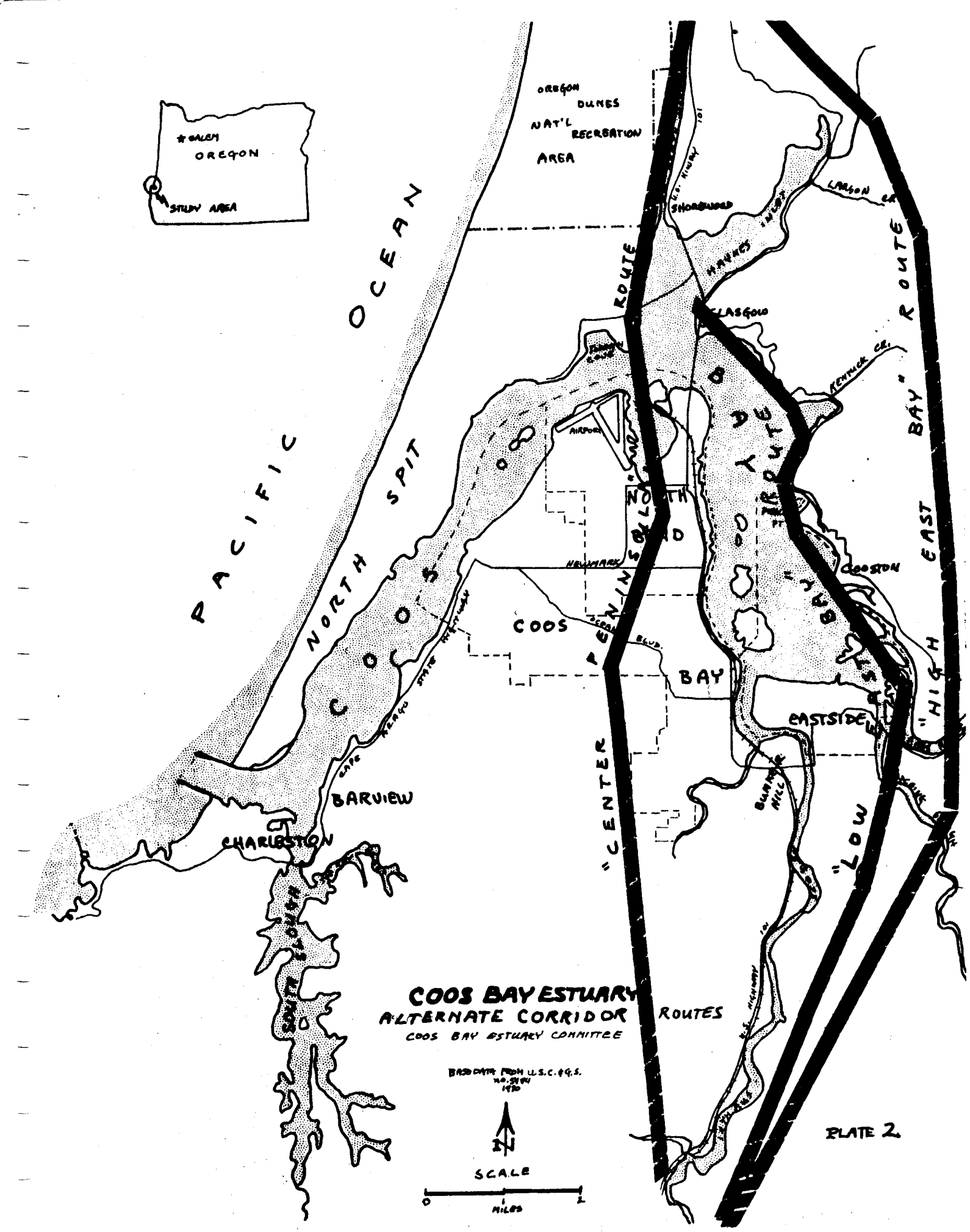


COOS BAY ESTUARY
VICINITY MAP

PLATE 1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STUDY AREA
OREGON DUNES NAT'L RECREATION AREA
PACIFIC OCEAN
NORTH SPIT
COOS
COOS PENINSULA
COOS BAY
BARVIEW
CHARLESTON
SOUTH SLOUGH
NORTH BAY
EASTSIDE
COOSTON
GLASGOW
SHORELINE
HAINES INLET
LARSON CR.
KENNICK CR.
AIRPORT
NEWMARK
BLVD.
BUNKER HILL
"CENTER ROUTE"
"HIGH EAST BAY ROUTE"
"LOW ROUTE"
COOS BAY ESTUARY
ALTERNATE CORRIDOR ROUTES
COOS BAY ESTUARY COMMITTEE
BASE DATA FROM U.S.C. & G.S.
NO. 5518 N
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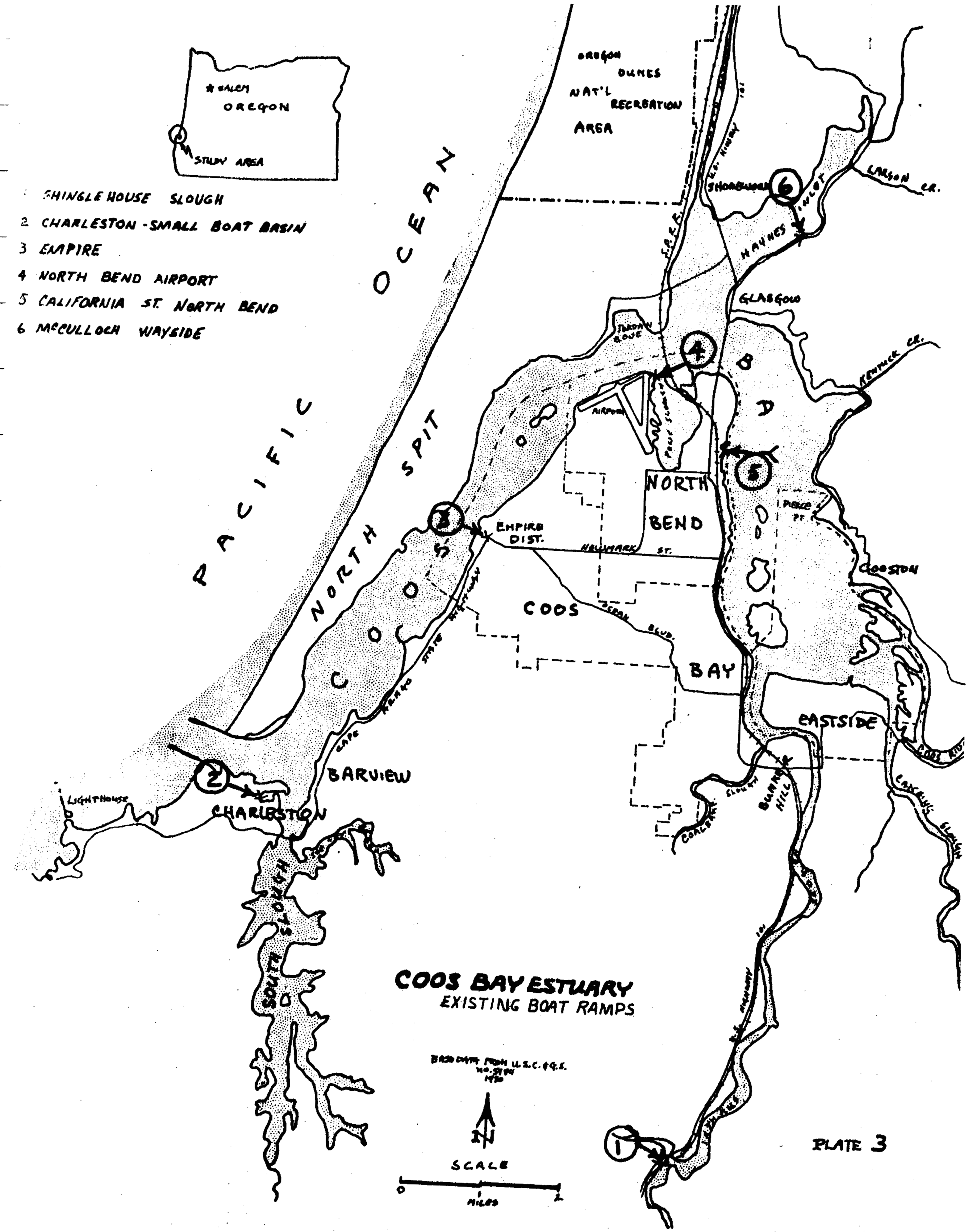
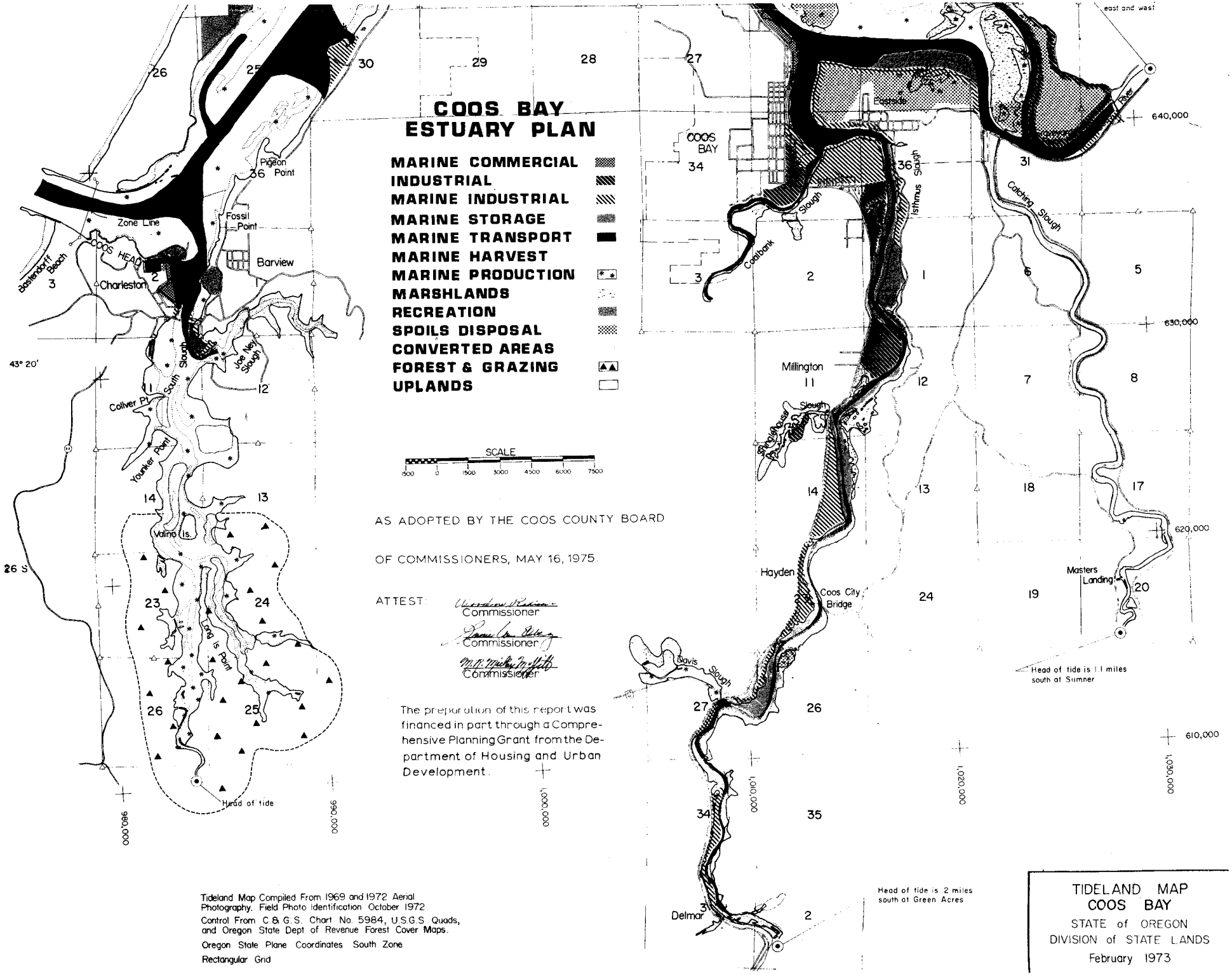
1
2
MILES

PLATE 2.



COOS BAY ESTUARY
EXISTING BOAT RAMPS

PLATE 3


COOS BAY
ESTUARY PLAN
MARINE COMMERCIAL
INDUSTRIAL
MARINE INDUSTRIAL
MARINE STORAGE
MARINE TRANSPORT
MARINE HARVEST
MARINE PRODUCTION
MARSHLANDS
RECREATION
SPOILS DISPOSAL
CONVERTED AREAS
FOREST & GRAZING
UPLANDS
SCALE
1500 0 1500 3000 4500 6000 7500
AS ADOPTED BY THE COOS COUNTY BOARD
OF COMMISSIONERS, MAY 16, 1975.
ATTEST:
Commissioner
Commissioner
Commissioner
The preparation of this report was financed in part through a Comprehensive Planning Grant from the Department of Housing and Urban Development.
Tideland Map Compiled From 1969 and 1972 Aerial Photography. Field Photo Identification October 1972.
Control From C & G.S. Chart No. 5984, U.S.G.S. Quads, and Oregon State Dept. of Revenue Forest Cover Maps.
Oregon State Plane Coordinates South Zone
Rectangular Grid
Head of tide is 2 miles south at Green Acres
Head of tide is 11 miles south at Sumner
TIDELAND MAP
COOS BAY
STATE of OREGON
DIVISION of STATE LANDS
February 1973
Charleston
Barview
Pigeon Point
Fossil Point
Zone Line
COOS HEAD
Bastendorff Beach
Joe Ney Slough
South Slough
Collver Pt.
Yourker Point
Valino Is.
Long Is. Point
Head of tide
Coos Bay
Eastside
Isthmus Slough
Catching Slough
Millington
Hayden
Coos City Bridge
Masters Landing
Davis Slough
Delmar
640,000
630,000
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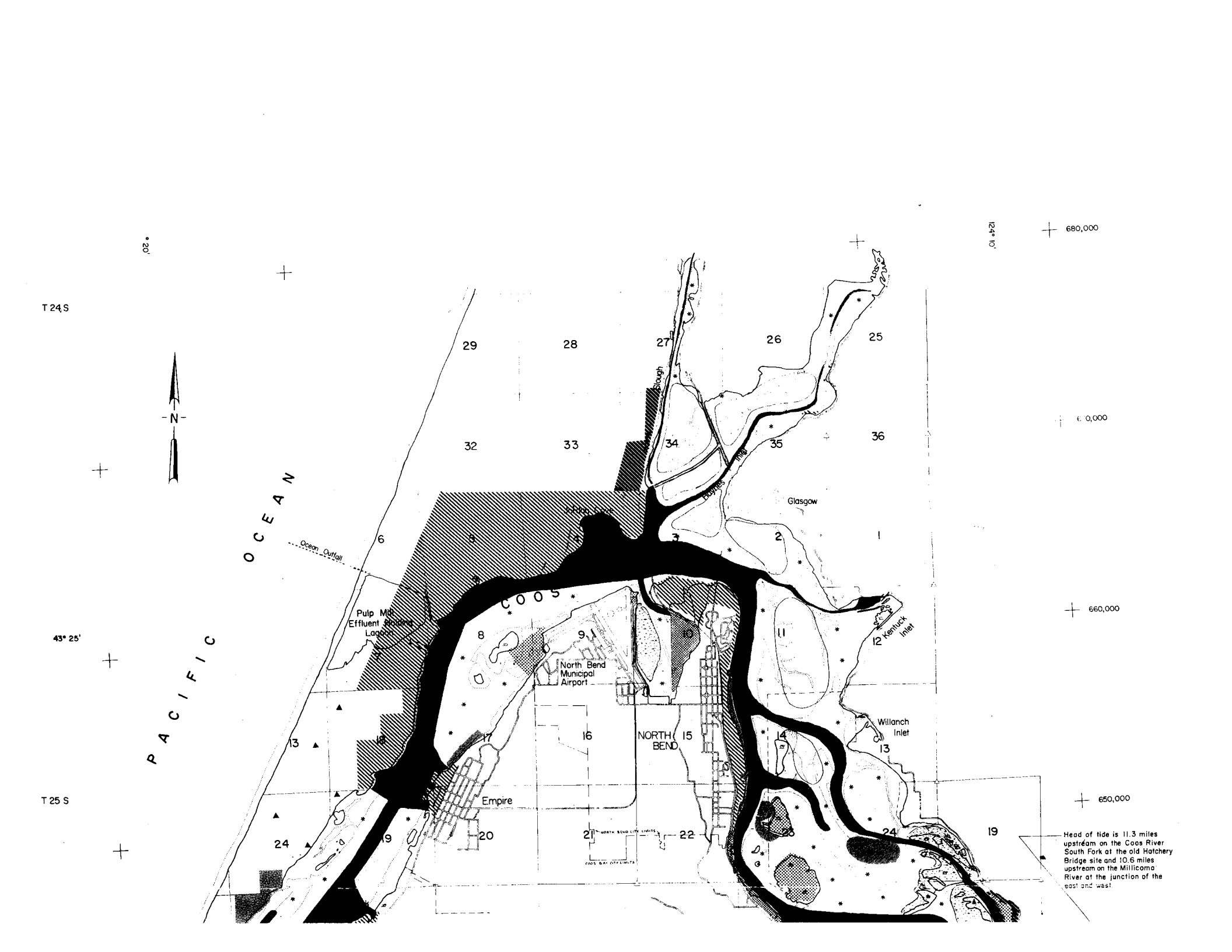
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Kentuck Slough
Hughes Inlet
Glasgow
Kentuck Inlet
North Bend Municipal Airport
NORTH BEND
Willanch Inlet
Empire
NORTH BEND CITY LIMITS
COOS BAY CITY LIMITS
Head of tide is 11.3 miles upstream on the Coos River South Fork at the old Hatchery Bridge site and 10.6 miles upstream on the Millicoma River at the junction of the east and west