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AT ..... O'CLOCK ..... M.
JUN 25 1980
D. M. PENFOLD, Director of the
Dept. of General Services of Lane County
BY ..... DEPUTY

REC'D 101 PAGE 1006

BEFORE THE BOARD OF COUNTY COMMISSIONERS OF LANE COUNTY, OREGON

ORDINANCE NO. 803

(IN THE MATTER OF ADOPTING THE
(LANE COUNTY COASTAL GOALS
(COMPLIANCE REPORT, A COMPONENT
(OF THE COUNTY COMPREHENSIVE
(PLAN

WHEREAS the Board of County Commissioners has received from the West Lane Planning Commission a resolution dated April 17, 1980, of record herein, recommending approval of the plan known as the "Coastal Goals Compliance Report," and

WHEREAS the Board of County Commissioners has received and considered the Coastal Goals Compliance Report, public testimony and correspondence relating thereto; and

WHEREAS, the Board of County Commissioners has performed its public hearing and other duties in accordance with applicable law; now therefore

THE BOARD OF COUNTY COMMISSIONERS OF LANE COUNTY ORDAINS AS FOLLOWS: That the Coastal Goals Compliance Report for Lane County (copy attached hereto and indicated as Appendix "A"), as modified by the Board of County Commissioners (copy attached hereto and indicated as Appendix "B") be ADOPTED.

ENACTED this 19th day of June , 1980.

APPROVED AS TO FORM
DATE 6/18/80 lane county
OFFICE OF LEGAL COUNSEL

Chairman, Lane County Board of Commissioners

Recording Secretary for this meeting of the Board

ORDINANCE NO. 803

IN THE MATTER OF ADOPTING THE LANE COUNTY COASTAL GOALS COMPLIANCE REPORT, A COMPONENT OF THE COUNTY COMPREHENSIVE PLAN

IN THE WEST LANE PLANNING COMMISSION

IN THE MATTER OF RECOMMENDING AND REPORTING ON THE PROPOSED COASTAL GOALS COMPLIANCE REPORT, A COMPONENT OF THE COMPREHENSIVE PLAN FOR LANE COUNTY

RESOLUTION

WHEREAS Chapter 12, Lane Code, establishes procedures for adopting the comprehensive plan for Lane County; and

WHEREAS, the Board of County Commissioners has requested our recommendation and report on the plan known as the "Coastal Goals Compliance Report," of record herein; and

WHEREAS, the Commission has held hearings and has otherwise duly performed its duties; therefore

IT IS HEREBY RESOLVED that the proposed "Coastal Goals Compliance Report" consisting of the below-described and attached Appendices be forwarded to the Board of County Commissioners with a recommendation for approval:

Appendix "A": Coastal Goals Compliance Report, dated February 1, 1980.

Appendix "B": Modifications to Appendix "A" made by West Lane Planning Commission following Public Hearings on Appendix "A".

FURTHER, the Secretary of the Planning Commission is hereby directed to prepare a report of our proceedings to accompany this resolution and deliver this Resolution and the prepared report to the Board of County Commissioners forthwith.

Meeting of April 17 , 1980
Ayes: Gardineer, Hughes, Miller, Wysong
Nayes: Jensen, May
Abstaining: None
Absent: None
Not Voting: Shelton

Donna L. Shelton
Chairperson, West Lane Planning Commission

AGENDA COVER MEMO

DATE

TO: LANE COUNTY BOARD OF COMMISSIONERS

DEPT. Environmental Management, Planning Division, x 4186

PRESENTED BY: Copely, Crook & Perkins

AGENDA ITEM TITLE: Coastal Goals Compliance Report

PROPOSED MOTION:

MOVE ADOPTION OF ORDINANCE 803, ADOPTING COASTAL GOALS COMPLIANCE REPORT.

(Please Note: Because of oversight, Ordinance 803 did not receive first reading two weeks prior to first hearing, May 15. Accordingly, May 15 should be the first reading date, with second reading/public hearing set for June 12 -- now scheduled as a continuance date for the matter. Board should not act on the Ordinance until after June 12 hearing is closed.)

BACKGROUND/ANALYSIS:

1. Statewide Planning Goals require specific plans to be adopted for Coastal area, including Estuary water surface, Shorelands along lakes and rivers, Beach & Dune areas and Ocean Resource areas.

2. To comply with Goals, "Coastal Goal Compliance Report" was developed and submitted for public review. Following that, West Lane Planning Commission held several work sessions during 1979 and 1980, to revise draft Report. Commission held formal hearings on the Report March 5 and 26, and conducted additional work sessions to incorporate testimony into draft Report on April 3, 14 and 17. On April 17, the Commission moved to forward the Report to the Board with a recommendation for adoption.

3. Matter is now before the Board for public hearings May 15 and June 12 (also first and second readings of Ordinance 803). Also being brought to Board is an Addendum incorporating some new information, correcting typos, etc., identified after WLPC action. The Board may wish to make further changes as well, which could be added to the Addendum.

IMPLEMENTATION/FOLLOW-UP:

Conduct public hearings on Report and Addendum (Appendices "A" and "B" of Ordinance 803), on May 15 and June 12 as presently scheduled. Adopt Ordinance 803 as revised on June 12.

ATTACHMENTS (LIST):

1. Ordinance 803
2. Appendices "A" and "B" to Ordinance
3. Copy of West Lane Planning Commission Resolution.
4. Correspondence and other materials will be separately supplied to Board prior to hearing May 15, 1980

APPENDIX "A"
ORDINANCE 803

CHAPTER I

INTRODUCTION

BACKGROUND

Coastal areas have long been recognized for their unique environmental qualities. The Oregon planning system (both state and local levels) has taken the needs of coastal areas into account. Most recently (1976), the state Land Conservation and Development Commission (LCDC) adopted a series of four "Coastal Goals" which deal exclusively with planning and resource management in the Coastal Zone of the state - including Lane County.

The Coastal Goals, which have the same legal standing as the earlier 15 LCDC Statewide Planning Goals, are quite firm and specific in what kinds of planning products and implementation measures are expected to be adopted by local governments. For the most part, required measures center around the concept of "management units," which are areas in which certain activities can occur and others cannot (similar to a subarea plan land use designation). Because some coastal resource information utilized in this study is inadequate and in some cases in error, and because natural systems do experience change, further study and experience should allow for future MU boundary modifications. The MU concept is explained in more detail later in this report.

Up to this time, coastal planning in Lane County has been accomplished through the adoption of a "Coastal Subarea Plan" plus a Countywide Goals and Policies plan. Although these documents both address coastal issues, they do not accomplish the level of detail required by the Coastal Goals. This report - the "Coastal Goals Compliance Report" is intended to meet the LCDC mandate. A separate but related study ("Siuslaw River Dredged Material Disposal Plan") will also help meet that mandate. All four documents functioning together should fulfill state planning requirements for coastal area planning.

A number of data sources have been used in this report. A major one is a technical report compiled by planning consultants Wilsey & Ham, called "Lane County Coastal Resource Inventories" and designed to meet specific Inventory requirements spelled out in the Coastal Goals. Other data sources include a state publication, "Environmental Geology of Coastal Lane County" (Department of Geology and Mineral Industries), various reports of the former Oregon Coastal Conservation & Development Commission (OCC&DC), and information gathered during the Coastal Subarea Plan preparation process.

THE COASTAL GOALS COMPLIANCE REPORT

As mentioned above, this report responds directly to the LCDC mandate for Coastal-area planning. The contents of the report are summarized below.

Coastal Goals of the Oregon Land Conservation & Development Commission:

For the information of the reader who needs to know exactly what the state mandate consists of, the full text of the four Coastal Goals is reprinted.

Estuarine Resources & Coastal Shorelands:

According to state guidelines, this report defines designated estuarine and shoreland management units (MUs) specifies priority levels for land use within these MUs, and details allowed and conditional uses. The specific recommendations for land use regulation in these MUs are generally based directly on the state mandated guidelines.

Specific policies in this document regarding forestry practices are intended as recommendations to the Oregon State Board of Forestry. Suggestions are made for modification of the Forestry Practices Act (FPA) procedures and rules to meet the requirements of the Coastal Goals. Lane County realizes that final change in FPA rules and procedures may not comply with all County recommendations owing to the necessity to adopt rule changes to satisfy diverse Coastal County approaches.

Because of the extent of available data on Lane County's estuarine and shoreland habitats, these two goals have been addressed in greater detail than the "Beaches and Dunes Goal." However, there are still significant gaps in data which must be filled before these goals can be fulfilled with complete satisfaction. Specifically, more information must be provided on the Siuslaw River estuary and on flood hazards that currently exist. These data deficiencies are discussed in the "Further Study and Problems" section of this report.

Beaches and Dunes:

The Beaches and Dunes section of this report differs from those above in that specific management units are not assigned. Instead, five categories of duneforms are identified and general development guidelines are provided. Allowed land uses are designated by the comprehensive plan and zoning which were determined separately from, but in conjunction with, this report.

Ocean Resources:

A brief discussion is made of the "Ocean Resources Goal." Because the requirements of this goal pertain almost exclusively to state and federal agencies, the County's responsibilities are limited.

CHAPTER II

THE GOALS

INTRODUCTION

The Coastal Goals of the LCDC have, in simplest terms, the force of law. They must be complied with to the extent possible, given that there will be some give-and-take between various provisions of them and that on occasion it will not be possible to comply completely wih a certain aspect of one or the other goal (such as beaches and dunes, where some necessary information is simply not available yet). The Goal statements are broken into several parts: The Goal statement itself, Inventory requirements, Comprehensive Plan requirements, and Implementation requirements. Each requirement spells out a task or tasks which must be accomplished by the local government doing the planning. These statements are then followed by a series of "guidelines" which are suggested ways of achieving some of the tasks mandated by earlier statements - guidelines do not have the force of law but should be used if appropriate.

This Coastal Goal Compliance Report is designed to respond to the Goal statement and the Comprehensive Plan requirements only. Inventory requirements have been met through the Wilsey & Ham study cited earlier. Implementation requirements will be the subject of a later study which will go through the same review and adoption process as this report.

Below are reprinted the texts of the four Coastal Goal statements, including Inventory requirements (for information purposes only) and the Comprehensive Plan requirements, which are made a part of this report. In the interest of brevity, the Guidelines have not been reprinted; the reader should refer to the LCDC publication itself for that information.

Goal 16 -- Estuarine Resources:

GOAL:

OVERALL STATEMENT

To recognize and protect the unique environmental, economic and social values of each estuary and associated wetlands; and

To protect, maintain, where appropriate develop, and where appropriate restore the long-term environmental, economic, and social values, diversity and benefits of Oregon's estuaries.

Comprehensive management programs to achieve these objectives shall be developed by appropriate local, state, and federal agencies for all estuaries.

To assure diversity among the estuaries of the State, by June 15, 1977, LCDC with the cooperation and participation of local governments, special districts, and state and federal agencies shall classify the Oregon estuaries to specify the most intensive level of development or alteration which may be allowed to occur within each estuary. After completion for all estuaries of the

inventories and initial planning efforts, including identification of needs and potential conflicts among needs and goals and upon request of any coastal jurisdiction, the Commission will review the overall Oregon Estuary Classification.

Comprehensive plans and activities for each estuary shall provide for appropriate uses (including preservation) with as much diversity as is consistent with the overall Oregon Estuary Classification, as well as with the biological, economic, recreational, and aesthetic benefits of the estuary. Estuary plans and activities shall protect the estuarine ecosystem, including its natural biological productivity, habitat, diversity, unique features and water quality. Dredge, fill, or other reduction or degradation of these natural values by man shall be allowed only:

(1) if required for navigation or other water-dependent uses that require an estuarine location; and
(2) if a public need is demonstrated; and
(3) if no alternative upland locations exist; and
(4) if adverse impacts are minimized as much as feasible.

INVENTORY REQUIREMENTS

Inventories shall be conducted to provide information necessary for designating estuary uses and policies. These inventories shall provide information on the nature, location, and extent of physical, biological, social and economic resources in sufficent detail to establish a sound basis for estuarine management and to enable the identification of areas for preservation and areas of exceptional potential for development.

State and federal agencies shall assist in the inventories of estuarine resources. The Department of Land Conservation and Development, with assistance from local government, state and federal agencies, shall establish common inventory standards and techniques, so that inventory data collected by different agencies or units of government, or data between estuaries, will be comparable.

COMPREHENSIVE PLAN REQUIREMENTS

Based upon inventories, the limits imposed by the overall Oregon Estuary Classification, and needs identifed in the planning process, comprehensive plans for coastal areas shall:

(1) identify each estuarine area;
(2) describe and maintain the diversity of important and unique environmental, economic and social features within the estuary;
(3) classify the estuary into management units; and
(4) establish policies and use priorities for each management unit using the standards and procedures set forth below.

Management Units

Diverse resources, values, and benefits shall be maintained by classifying the estuary into distinct water use management units. When classifying estuarine

areas into management units, the following shall be considered in addition to the inventories:

(1) Adjacent upland characteristics and existing land uses;
(2) Compatibility with adjacent uses;
(3) Energy costs and benefits; and
(4) The extent to which the limited water surface area of the estuary shall be committed to different surface uses.

As a minimum, the following kinds of management units shall be established:

(1) Natural -- In all estuaries, areas shall be designated to assure the protection of significant fish and wildlife habitats, of continued biological productivity within the estuary, and of scientific, research, and educational needs. These shall be managed to preserve the natural resources in recognition of dynamic, natural, geological and evolutionary processes. Such areas shall include, at a minumum, all major tracts of salt marsh, tideflats, and seagrass and algae beds.

Permissible uses in natural areas shall be undeveloped low-intensity water-dependent recreation; research and educational observation; navigational aides, such as beacons and buoys; protection of habitat, nutrient, fish, wildlife and aesthetic resources; passive restoration measures; and where consistent with the resource capabilities of the area and the purposes of this management unit, aquaculture; communication facilities; and active restoration measures.

(2) Conservation -- In all estuaries, except those in the overall Oregon Estuary Classification which are classed for preservation, areas shall be designated for long-term uses of renewable resources that do not require major alteration of the estuary, except for the purpose of restoration. These areas shall be managed to conserve the natural resources and benefits. These shall include areas needed for maintenance and enhancement of biological productivity, recreational and aesthetic uses, and aquaculture. They shall include tracts of significant habitat smaller/or of less biological importance than those in (1) above, and oyster and clam beds. Partially altered areas or estuarine areas adjacent to existing development of moderate intensity shall also be included in this classification unless otherwise needed for preservation or development consistent with the overall Oregon Estuary Classification. Permissible uses in conservation areas shall be those allowed in (1) above; active restoration measures; aquaculture; and communication facilities. Where consistent with resource capabilities of the area and the purposes of this management unit, high-intensity water-dependent recreation; maintenance dredging of existing facilities; minor navigational improvements; mining and mineral extraction; water dependent uses requiring occupation of water surface area by means other than fill; and bridge crossings, shall also be appropriate.

(3) Development -- In estuaries classified in the overall Oregon Estuary Classification for more intense development or alteration, areas shall be designated to provide for navigation and other identified needs for public, commercial, and industrial water-dependent uses, consistent with

the level of development or alteration allowed by the overall Oregon Estuary Classification. Such areas shall include deep-water areas adjacent or in proximity to the shoreline, navigation channels, subtidal areas for in-water disposal of dredged material and areas of minimal biological significance needed for uses requiring alteration of the estuary.

Permissible uses in areas managed for water-dependent activities shall be navigation and water-dependent commercial and industrial uses. Where consistent with the resource capabilities and the purposes of this management unit, water-related and nondependent, nonrelated uses not requiring fill; mining and mineral extraction; and activities identified in (1) and (2) above, shall also be appropriate.

As appropriate, needs for the following uses shall be included:

(a) Dredge or fill, as allowed elsewhere in the goal;
(b) Navigation and water-dependent commercial enterprises and activities;
(c) Water transport channels where dredging may be necessary;
(d) Disposal of dredged material;
(e) Water storage areas where needed for products used in or resulting from industry, commerce, and recreation;
(f) Marinas;
(g) Aquaculture;
(h) Extraction of aggregate resources;
(i) Restoration.

The cumulative effect of all such uses, activities and alterations shall be considered and described during plan development and adoption. In designating areas for these uses, local governments shall consider the potential for using upland sites to reduce or limit the commitment of the estuarine surface area for surface uses.

Priority

Priorities for use of each of the management units shall be designated which maintain, promote, encourage, or enhance uses and activities compatible with the requirements of this Goal, the capability of the resources, and the objectives of the classification.

While the priorities may vary between individual management units consistent with these requirements, the general priorities (from highest to lowest) for use of estuarine resources and for designating different estuarine management units shall be:

(1) Uses which maintain the integrity of the estuarine ecosystem;
(2) Water-dependent uses requiring estuarine location, as consistent with the overall Oregon Estuarine Classification;
(3) Water-related uses which do not degrade or reduce the natural estuarine resources and values; and
(4) Nondependent, nonrelated uses which do not alter, reduce or degrade the estuarine resources and values.

Implementation Requirements

(1) Unless fully addressed during the development and adoption of comprehensive plans, actions which would potentially alter the integrity of the estuarine ecosystem shall be preceded by a clear presentation of the impacts of the proposed alteration, and a demonstration of the public's need and gain which warrant such modification or loss.

(2) State and federal agencies shall review, revise and implement their plans, actions and management authorities to maintain water quality and minimize man-induced sedimentation in estuaries. Local government shall recognize these authorities in managing lands rather than developing new or duplicatory management techniques or controls.

Existing programs which shall be utilized include:

(a) The Oregon Forest Practices Act and Administrative Rules for forest lands as defined in ORS 527.610 - 527.730 and 527.990 and the Forest Lands Goal;

(b) The programs of the Soil and Water Conservation Commission and local districts and the Soil Conservation Service, for Agricultural Lands Goal;

(c) The nonpoint source discharge water quality program administered by the Department of Environmental Quality under Section 208 of the Federal Water Quality Act as amended in 1972 (PL 92-500); and

(d) The Fill and Removal Permit Program administered by the Division of State Lands under ORS 541.605 - 541.665.

(3) The State Water Policy Review Board, assisted by the staff of the Oregon Department of Water Resources, and the Oregon Department of Fish and Wildlife, the Oregon Department of Environmental Quality, the Division of State Lands, and the US Geological Survey, shall consider establishing minimum freshwater flow rates and standards so that resources and uses of the estuary, including navigation, fish and wildlife characteristics, and recreation, will be maintained.

(4) When dredge or fill activities are permitted in intertidal or tidal marsh areas, their effects shall be mitigated by creation or restoration of another area of similar biological potential to ensure that the integrity of the estuarine ecosystem is maintained.

(5) Local government and state and federal agencies shall develop comprehensive programs, including specific sites and procedures for disposal and stockpiling of dredge materials. These programs shall encourage the disposal of dredge material in uplands or ocean waters, and shall permit disposal in estuary waters only where such disposal will clearly be consistent with the objectives of this goal and state and federal law. Dredged material shall not be disposed in intertidal or tidal marsh estuarine areas unless part of an approved fill project.

(6) Local government and state and federal agencies shall act to restrict the proliferation of individual single-purpose docks and piers by encouraging community facilities common to several uses and interests. The size and shape of a dock or pier shall be limited to that required for the intended use. Alternatives to docks and piers, such as mooring buoys, dryland storage and launching ramps, shall be investigated and considered.

(7) State and federal agencies shall assist local government in identifying areas for restoration. Restoration is appropriate in areas where activities have adversely affected some aspect of the estuarine system, and where it would contribute to a greater achievement of the objective of this goal. Appropriate sites include areas of heavy erosion or sedimentation, degraded fish and wildlife habitats, anadromous fish spawning areas, abandoned diked estuarine marsh areas, and areas where water quality restricts the use of estuarine waters for fish and shellfish harvest and production, or for human recreation.

(8) State agencies with planning, permit or review authorities affected by this goal shall review their procedures and standards to assure that the objectives and requirements of the goal are fully addressed. In estuarine areas the following authorities are of special concern:

Division of State Lands

Fill and Removal Law	ORS 541.605 - 541.665
Mineral Resources	ORS 273.551; ORS 273.775 - 273.780
Submersible and Submerged Lands	ORS 274.005 - 274.940

Department of Economic Development

Ports Planning	ORS 777.835

Water Resources Department

Appropriation of Water	ORS 537.010 - 537.990; ORS 543.010 - 543.620

Department of Geology and Mineral Industries

Mineral Extraction Oil and Gas Drilling	ORS 520.005 - 520.095

Department of Forestry

Forest Practices Act	ORS 527.610 - 527.730

Department of Energy

Regulation of Thermal Power and Nuclear Installation	ORS 469.300 - 469.570

Department of Environmental Quality

Water Quality	ORS 468.700 - 468.775
Sewage Treatment and Disposal Systems	ORS 454.010 - 454.755

Goal 17 -- Coastal Shorelands:

GOAL

OVERALL STATEMENT

To conserve, protect, where appropriate develop and where appropriate restore the resources and benefits of all coastal shorelands, recognizing their value for protection and maintenance of water quality, fish and wildlife habitat, water-dependent uses, economic resources and recreation and aesthetics. The management of these shoreland areas shall be compatible with the characteristics of the adjacent coastal waters; and

To reduce the hazard to human life and property, and the adverse effects upon water quality and fish and wildlife habitat, resulting from the use and enjoyment of Oregon's coastal shorelands.

Programs to achieve these objectives shall be developed by local, state, and federal agencies having jurisdiction over coastal shorelands.

Land use plans, implementing actions and permit reviews shall include consideration of the critical relationships between coastal shorelands and resources of coastal waters, and of the geologic and hydrologic hazards associated with coastal shorelands. Local, state and federal agencies shall within the limit of their authorities maintain the diverse environmental, economic, and social values of coastal shorelands, and water quality in coastal waters. Within those limits, they shall also minimize man-induced sedimentation in estuaries, nearshore ocean waters, and coastal lakes.

INVENTORY REQUIREMENTS

Inventories shall be conducted to provide information necessary for identifying coastal shorelands and designating uses and policies. These inventories shall provide information on the nature, location, and extent of geologic and

hydrologic hazards and shoreland values, including fish and wildlife habitat, water dependent uses, economic resources, recreational uses, and aesthetics in sufficient detail to establish a sound basis for land and water use management.

The inventory requirements shall be applied within an area known as a coastal shorelands planning area. This planning area is not an area within which development or use is prohibited. It is an area for inventory, study, and initial planning for development and use to meet the Coastal Shorelands Goal.

The planning area shall be defined by the following:

(1) All lands west of the Oregon Coast Highway as described in ORS 366.235, except that:

(a) In Tillamook County, only the lands west of a line formed by connecting the western boundaries of the following described roadways: Brooten Road (County Road 887) northerly from its junction with the Oregon Coast Highway to Pacific City, McPhillips Drive (County Road 915) northerly from Pacific City to its junction with Sandlake Road (County Road 871), Sandlake-Cape Lookout Road, (County Road 871) northerly to its junction with Cape Lookout Park, Netarts Bay Drive (County Road 665) northerly from its junction with the Sandlake-Cape Lookout Road (County road 871) to its junction at Netarts with State Highway 131, and northerly along State Highway 131 to its junction with the Oregon Coast Highway near Tillamook;

(b) In Coos County, only the lands west of a line formed by connnecting the western boundaries of the following described roadways: Oregon State 240, Cape Arago Secondary (FAS 263) southerly from its junction with the Oregon Coast Highway to Charleston; Seven Devils Road (County Road 33) southerly from its junction with Oregon State 240 (FAS 263) to its junction with the Oregon Coast Highway, near Bandon; and

(2) All lands within an area defined by a line measured horizontally:

(a) 1,000 feet from the shoreline of estuaries; and

(b) 500 feet from the shoreline of coastal lakes.

COMPREHENSIVE PLAN REQUIREMENTS

Based upon inventories, comprehensive plans for coastal areas adjacent to the ocean, estuaries, or coastal lakes shall:

(1) identify coastal shorelands;

(2) establish policies and uses of coastal shorelands in accordance with standards set forth below:

Identification

Land contiguous with the ocean, estuaries and coastal lakes shall be identified as coastal shorelands. The extent of shorelands shall include at least:

(1) Lands which limit, control or are directly affected by the hydraulic action of the coastal water body, including floodways;

(2) Adjacent areas of geologic instability;

(3) Natural or man-made riparian resources, especially vegetation necessary to stabilize the shoreline and to maintain water quality and temperature necessary for the maintenance of fish habitat and spawning areas;

(4) Areas of significant shoreland and wetland biological habitats;

(5) Areas necessary for water-dependent and water-related uses, including areas of recreational importance which utilize coastal water or riparian resources, areas appropriate for navigation and port facilities, and areas having characterisitics suitable for aquaculture;

(6) Areas of exceptional aesthetic or scenic quality, where the quality is primarily derived from or related to the association with coastal water areas; and

(7) Coastal headlands.

Coastal Shoreland Uses

(1) Major marshes, significant wildlife habitat, coastal headlands, exceptional aesthetic resources, and historic and archeological sites shall be protected. Uses in these areas shall be consistent with protection of natural values. Such uses may include propagation and selective harvesting of forest products consistent with the Oregon Forest Practices Act, grazing, harvesting wild crops and low intensity water-dependent recreation.

(2) Shorelands in urban and urbanizable areas especially suited for water-dependent uses shall be protected for water-dependent recreational, commercial and industrial uses. Some factors which contribute to this special suitability are:

(a) deep water close to shore with supporting land transport facilities suitable for ship and barge facilities;

(b) potential for aquaculture;

(c) protected areas subject to scour which would require little dredging for use as marinas; and

(d) potential for recreational utilization of coastal water or riparian resources.

(3) Shorelands in rural areas other than those designated in (1) above shall be used as appropriate for:

(a) farm uses as provided in ORS Chapter 215;

(b) propagation and harvesting of forest products consistent with the Oregon Forest Practices Act;

(c) private and public water-dependent recreation developments;

(d) aquaculture;

(e) water-dependent commercial and industrial uses and water-related uses only upon a finding by the governing body of the county that such uses satisfy a need which cannot be accommodated on shorelands in urban and urbanizable areas;

(f) subdivisions, major and minor partitions and other uses only upon a finding by the governing body for the county that such uses satisfy a need which cannot be accommodated at other upland locations or in urban or urbanizable areas and are compatible with the objectives of this goal to protect riparian vegetation and wildlife habitat; and

(g) a single-family residence on existing lots, parcels or units of land when compatible with the objectives and implementation standards of this goal.

Priority

General priorities for the overall use of coastal shorelands (from highest to lowest) shall be to:

(1) Promote uses which maintain the integrity of estuaries and coastal waters;

(2) Provide for water-dependent uses;

(3) Provide for water-related uses;

(4) Provide for nondependent, nonrelated uses which retain flexibility of future use and do not prematurely or inalterably commit shorelands to more intensive uses;

(5) Provide for development, including nondependent, nonrelated uses, in urban areas compatible with existing or committed uses;

(6) Permit nondependent, nonrelated uses which cause a permanent or long-term change in the features of coastal shorelands only upon a demonstration of public need.

Implementation Requirements

(1) The Oregon Department of Forestry shall recognize the unique and special values provided by coastal shorelands when developing standards and policies to regulate uses of forest lands within coastal shorelands. With other state and federal agencies, the Department of Forestry shall develop forest management practices and policies which protect and maintain the special shoreland values and forest uses.

(2) The land use planning and regulatory authorities of local government and state and federal agencies shall manage floodplain areas in coastal shorelands to promote use and development consistent with the hazards to life and property. Priority uses for flood hazard and floodplain areas shall include agriculture, forestry, recreation and open space, and uses which are water-dependent.

(3) Local government, with assistance from state and federal agencies, shall identify coastal shoreland areas which may be used to fulfill the mitigation requirement of the Estuarine Resources Goal. These areas shall be protected from new uses and activities which would prevent their ultimate restoration or addition to the estuarine ecosystems.

(4) Coastal shorelands identified under the Estuarine Resources Goal for dredged material disposal shall be protected from new uses and activities which would prevent their ultimate use for dredged material disposal.

(5) Because of the importance of the vegetative fringe adjacent to coastal waters to water quality, fish and wildlife habitat, recreational use and aesthetic resource, riparian vegetation shall be maintained and, where appropriate, restored and enhanced, consistent with water-dependent uses.

(6) Land use management practices and nonstructural solutions to problems of erosion and flooding shall be preferred to structural solutions. Where shown to be necessary, water and erosion control structures, such as jetties, bulkheads, seawalls and similar protective structures; and fill, whether located in the waterways or on shorelands above ordinary high water mark, shall be designed to minimize adverse impacts on water currents, erosion and accretion patterns.

Goal 18 -- Beaches and Dunes:

GOAL

OVERALL STATEMENT

To conserve, protect, where appropriate develop, and where appropriate restore the resources and benefits of coastal beach and dune areas; and

To reduce the hazard to human life and property from natural or man-induced actions associated with these areas.

Coastal comprehensive plans and implementing actions shall provide for diverse and appropriate use of beach and dune areas consistent with their ecological, recreational, aesthetic, water resource, and economic values, and consistent with the natural limitations of beaches, dunes and dune vegetation for development.

INVENTORY REQUIREMENTS

Inventories shall be conducted to provide information necessary for identifying and designating beach and dune uses and policies. Inventories shall describe

the stability, movement, groundwater resource, hazards and values of the beach and dune areas in sufficient detail to establish a sound basis for planning and management. For beach and dune areas adjacent to coastal waters, inventories shall also address the inventory requirement of the Coastal Shorelands Goal.

COMPREHENSIVE PLAN REQUIREMENTS

Based upon the inventory, comprehensive plans for coastal areas shall:

(1) identify beach and dune areas; and

(2) establish policies and uses for these areas consistent with the provisions of this goal.

Identification

Coastal areas subject to this goal shall include beaches, active dune forms, recently stabilized dune forms, older stabilized dune forms and interdune forms.

Uses

Uses shall be based on the capabilities and limitations of beach and dune areas to sustain different levels of use or development, and the need to protect areas of critical environmental concern, areas having scenic, scientific, or biological importance, and significant wildlife habitat.

Implementation Requirements

(1) Local governments and state and federal agencies shall base decisions on plans, ordinances and land use actions in beach and dune areas, other than older stabilized dunes, on specific findings that shall include at least:

(a) the type of use proposed and the adverse effects it might have on the site and adjacent areas;

(b) temporary and permanent stabilization programs and the planned maintenance of new and existing vegetation;

(c) methods for protecting the surrounding area from any adverse effects of the development; and

(d) hazards to life, public and private property, and the natural environment which may be caused by the proposed use.

(2) Local governments and state and federal agencies shall prohibit residential developments and commercial and industrial buildings on active foredunes, on other foredunes which are conditionally stable and that are subject to ocean undercutting or wave overtopping, and on interdune areas (deflation plains) that are subject to ocean flooding. Other development in these areas shall be permitted only if the findings required in (1) above are presented and it is demonstrated that the proposed development:

(a) is adequately protected from any geological hazards, wind erosion, undercutting, ocean flooding and storm waves; or is of minimal value; and

(b) is designed to minimize adverse environmental effects.

(3) Local governments and state and federal agencies shall regulate actions in beach and dune areas to minimize the resulting erosion. Such actions include, but are not limited to, the destruction of desirable vegetation (including inadvertent destruction by moisture loss or root damage), the exposure of stable and conditionally stable areas to erosion, and construction of shore structures which modify current or wave patterns leading to beach erosion.

(4) Local, state and federal plans, implementing actions and permit reviews shall protect the groundwater from drawdown whch would lead to loss of stabilizing vegetation, loss of water quality or intrusion of salt water into water supplies.

(5) Permits for beach front protective structures shall be issued under ORS 390.605 - 390.770, only where development existed on January 1, 1977. The Oregon Department of Transportation, cooperating with local, state and federal agencies, shall develop criteria to supplement the Oregon Beach Law (ORS 390.605 - 390.770) for issuing permits for construction of beach front protective structures. The criteria shall provide that:

(a) visual impacts are minimized;
(b) necessary access to the beach is maintained;
(c) negative impacts on adjacent property are minimized; and
(d) long-term or recurring costs to the public are avoided.

(6) Foredunes shall be breached only to replenish sand supply in interdune areas, or on a temporary basis in an emergency (e.g., fire control, cleaning up oil spills, draining farm lands, and alleviating flood hazards), and only if the breaching and restoration after breaching is consistent with sound principles of conservation.

Goal 19 -- Ocean Resources:

GOAL

OVERALL STATEMENT

To conserve the long-term values, benefits and natural resources of the nearshore ocean and the continental shelf.

All local, state, and federal plans, policies, projects, and activities which affect the territorial sea shall be developed, managed and conducted to maintain, and where appropriate, enhance and restore, the long-term benefits derived from the nearshore oceanic resources of Oregon. Since renewable ocean resources and uses, such as food production, water quality, navigation, recreation and aesthetic enjoyment will provide greater long-term benefits than will nonrenewable resources, such plans and activities shall give clear priority to the proper management and protection of renewable resources.

INVENTORY REQUIREMENTS

As local governments and state and federal agencies implement plans or carry out actions, projects, or activities related to or affecting ocean resources, they shall develop inventory information necessary to understand the impacts and relationship of the proposed activity to continental shelf and nearshore ocean resources. As specific actions are proposed, inventory information shall be gathered by the unit of government considering the action with assistance from those agencies and governments which use or manage the resources. The inventory shall be sufficient to describe the long-term impacts of the proposed action on resources and uses of the continental shelf and nearshore ocean.

(NOTE: Because the Implementation Requirements for the Ocean Resources Goal are directed basically toward state and federal levels, they are not reprinted here.)

CHAPTER III

GOAL 16 - ESTUARINE RESOURCES

INTRODUCTION

Consistent with the requirements of Goal 16 and the designation of the Siuslaw as a Shallow Draft Development Estuary, estuarine areas were placed into three management Units (MUs): Natural, Conservation or Development. Designation of the various management units was based on the Lane County Coastal Resource Inventory and accompanying maps (Maps III, 1 through IV 7) conducted by Wilsey and Ham, plus subsequent inventory information. Each management unit identified on subsequent pages is a unique biological, physical and economic unit. The intent is to provide a diverse mixture of use and preservation of the Siuslaw estuary's natural resources such that the long-term economic, environmental and social values can be maintained.

The following section defines the three management unit categories, setting priorities for uses within them and listing the various uses permitted within each.

A subsequent section designates specific MUs within the estuary. The unique features of each MU are described and special considerations based on these features are established. The text of this section corresponds to the lettered MUs shown on the attached maps of estuarine resources.

Management Unit Definitions:

Natural:

This designation is designed to assure the protection of significant fish and wildlife habitats, the continued biological productivity within the estuary, provide for educational and scientific needs and to maintain a level of diversity essential to provide for a long-term, dynamic ecosystem which can withstand a variety of pressures. All major tracts of saltmarsh, tideflats and eelgrass and algae beds will be found in this MU, as they are the areas of primary biological productivity without which the health of the entire estuary could not be maintained.

Uses within the "NATURAL" MU shall be of a low-intensity, undeveloped nature stressing minimal human impact. Recreational clamming and fishing are examples of acceptable uses within this MU.

Policies:

1. Log storage sites in existence as of October 7, 1977, may continue if directly associated with an existing wood processing facility if such facility is integrally tied to the use of water for handling. Facilities on which log storage depends which are covered by lease agreement may be replaced if damaged or destroyed. Renewal of Division of State Lands log storage leases shall require a re-evaluation of the sites in terms of:

a. number of sites;
b. amount of estuarine area used at a site;
c. relocating to a less environmentally sensitive site;
d. frequency or duration of storage at a site; or
e. economic importance of the storage site to the wood processing operation.

No additional sites or expansion of existing sites is permitted.

2. Low-intensity grazing on high salt marshes is consistent within the capacity of the marsh to accommodate such use and retain significant natural characteristics.

3. Commercial clamming and fishing shall only be allowed to the extent that the productivity of the resource is not endangered. The Oregon Department of Fish and Wildlife shall be the proper consulting agency in this regard.

4. No filling, regardless of volume, shall be allowed in this MU. Riprap to protect structures existing prior to October 7, 1977 shall be allowed provided other protection measures less harmful to the estuary have been considered. Riprap must meet Army Corps of Engineer strength standards.

Conservation:

The primary purpose of this MU is preservation of long-term use of renewable resources which do not require major alteration of the estuary. The majority of the Siuslaw River estuary is included in this MU to reflect the predominantly rural, sparsely developed nature of this estuary.

Although certain commercial and recreational uses may be consistent with the resource capabilities and purpose of this MU, each proposal will be evaluated on its potential for maintenance and enhancement of biological productivity.

Policies:

1. Log storage sites in existence as of October 7, 1977, may continue if directly associated with an existing wood processing facility if such facility is integrally tied to the use of water for handling. Facilities on which log storage depends which are covered by lease agreement may be replaced if damaged or destroyed.

   Renewal of Division of State Lands log storage leases shall require a re-evaluation of the sites in terms of:

   a. number of sites;
   b. amount of estuarine area used at a site;
   c. relocating to a less environmentally sensitive site;
   d. frequency or duration of storage at a site; or
   e. economic importance of the storage site to the wood processing operation.

   Leases involving expansion of existing sites or creation of new sites shall be permitted only if it can be demonstrated that:

1. The use is water dependent;

2. Adverse impacts on water quality and biological resources are minimized as much as feasible; and

3. The use does not interfere with recreational use of the site if such use is traditionally established.

4. Single-family, single-purpose piers are discouraged in favor of public, multiple-purpose or commercial piers. Mooring buoys, floating piers, launching ramps and dry-land storage are potential alternatives.

5. Filling in Conservation Management Units is permitted to protect man-made structures in existence on October 7, 1977, for active restoration if a public need is demonstrated or for aquaculture, high-intensity water-dependent recreation or minor navigational improvement, if:

   a. An estuarine location is required;

   b. A public need is demonstrated;

   c. No alternative upland locations exist for the portion of the use requiring fill;

   d. Adverse impacts are minimized as much as feasible;

   e. If consistent with the resource capabilities of the area and the purposes of the management unit; and

   f. No alternative locations exist within the estuary.

Development:

Providing for navigational, public, commercial and industrial water-dependent needs is the purpose of this designation. This report assigns the dredged navigation channel and the jetties to this category, essentially responding to the existing situation. It will be necessary to effect a plan amendment for future uses requiring a Development designation. The cumulative effect of all such changes, as well as the potential for using upland sites to limit use of the estuarine surface area, shall be considered in each case.

Developmental activities can and have produced adverse effects on the Siuslaw Estuary. Sedimentation resulting from logging practices contributes to the turbulent bar-crossing situation at the mouth of the river and the continuous need for channel dredging. Conversely, bank and streambed erosion can result when flow is constricted through the emplacement of bridge supports. In addition, industrial or residential development can cause further chemical and biological changes in the estuary.

When considering further development along the estuary it will be necessary to review the individual and cumulative effects to determine further impacts both on the natural systems and the local economy.

Policies:

1. New dredging projects, any project which requires filling of the estuary, or other degradation of natural biological values, shall be allowed only:

   a. if required for navigation or other water-dependent uses that require an estuarine location; and

   b. if a public need is demonstrated; and

   c. if no alternative upland locations exist; and

   d. if adverse impacts are minimized as much as feasible.

2. Dredge or fill activities, as otherwise approved, must be mitigated, if found to be subject to the mitigation requirement, by creation, restoration or enhancement of an estuarine area to maintain the functional characteristics and processes of the estuary such as its natural biological productivity, habitats and species diversity, unique features and water quality.

3. Maintenance dredging of the navigation channel, as authorized in the Siuslaw River Dredged Material Disposal Plan, is automatically approved and need not go through an impact assessment for each individual project.

4. Proposals must consider and not be detrimental to natural characteristics of value in the adjacent estuary.

5. Flood and erosion control structures such as jetties, bulkheads and seawalls, shall meet the requirements of Policy #1 and shall be designed and sited to minimize:

   (1) erosion of man-induced sedimentation in adjacent areas, and

   (2) other adverse impacts on water currents, water quality, and fish and wildlife habitat.

MITIGATION AND RESTORATION

It is recognized that previous actions in the Siuslaw Estuary, including logging, diking of wetlands and dredge and fill projects have resulted in a degradation of estuarine biological values. Likewise, further development of the estuary for water-dependent or water-related industrial, commercial or recreational uses and continued development of adjacent shorelands will likely result in some further sedimentation of the estuary. It is anticipated that undisturbed riparian strips required adjacent to forestry and other lands will reduce this sedimentation and that planned channel dredging will modify that which does occur.

The County has designated no dredged material disposal sites for intertidal or subtidal areas. All disposal sites approved in the Siuslaw River Dredged Material Disposal Plan (1978) occur in upland locations. Since no negative estuarine impacts are anticipated from upland spoils disposal, the designation of restoration/mitigation sites for this purpose is clearly unnecessary. There is also a lack of restoration/mitigation sites available on the Siuslaw because:

1) those diked lands which have restoration potential are presently in private ownership and are being actively farmed; and 2) the majority of old dredged material disposal sites in the estuary have developed salt marsh communities through natural processes and further 'restoration' actions would not be appropriate.

Therefore, since there is a limited need for restoration/mitigation sites and as potential sites are limited in number, this report designates only a few sites as suitable for this use. Designated mitigation sites for presently unknown future estuarine modifications are limited to old dredged material disposal sites within the estuary which do not presently exhibit subtidal or intertidal vegetation communities.

It is anticipated that the bulk of estuary development and alteration will occur within the Florence urban area and that such development will require mitigation. These old dredge spoil sites will provide some limited area for the required mitigation.

GENERAL USE PRIORITIES

Four levels of priorities apply to all uses in the estuarine management units. Uses within the Natural MU will utilize Priorities 1 and 2 (in that order) for an evaluation. The Conservation MU uses will fall within Priorities 1-3 (in that order) and will be considered on that basis. Priorities 2-4 (in that order) will be uses to evaluate proposals in a Development category. This is not meant to downplay the importance of Priority 1, only to indicate that a Development category, when applied, is to provide for commercial and industrial needs and is balanced estuary-wide with biological needs. Diversity of uses within the estuary is essential to the economic well-being of the area and is indicated by the "Shallow-Draft" designation given the Siuslaw River Estuary by LCDC. To provide this diversity while maintaining the health of the estuary is the underlying concern behind evaluation of all uses by this priority system.

PRIORITIES (from highest to lowest):

1. Uses which maintain the integrity of the estuarine ecosystem;

2. Water-dependent uses requiring estuarine location, as consistent with the overall Oregon Estuarine Classification;

3. Water-related uses which do not degrade or reduce the natural estuarine resources and values;

4. Nondependent, nonrelated uses which do not alter, reduce or degrade the estuarine resources and values.

RESOURCE USES WITHIN MANAGEMENT UNITS

I. Natural:

A. Permitted Uses:

1. Undeveloped, low-intensity, water-dependent recreation;

2. Research and educational needs;

3. Navigation aids, such as beacons and buoys;

4. Passive estuary restoration.

5. Protection of habitat, nutrient, fish, wildlife and aesthetic resources.

B. Conditional Uses (uses possible where consistent with resource capabilities and purpose of Management Unit. These uses require findings that the use is consistent with the resource capabilities of the area and with the purposes of the management unit).

1. Aquaculture;

2. Communication facilities;

3. Active estuary restoration;

4. Low-intensity grazing on high salt marshes;

5. Riprap revetments to protect structures existing prior to October 7, 1977; and

6. Commercial clamming and fishing.

II. Conservation:

A. Permitted Uses:

1. Uses listed in IA;

2. Aquaculture;

3. Communication Facilities;

4. Active estuary restoration.

B. Conditional Uses (uses possible where consistent with resource capabilities and purpose of Management Unit. These uses require findings that the use is consistent with the resource capabilities of the area and with the purposes of the management unit):

1. High-intensity, water-dependent recreation;

2. Maintenance dredging of existing facilities;

3. Mining and mineral extraction;

4. Water-dependent uses requiring occupation of the water surface by means other than fill;

5. Bridge crossing.

6. Minor navigational improvements.

III. Development:

A. Permitted Uses:

1. Navigation;

2. Water-dependent commercial activities;

3. Water-dependent industrial activities.

B. Conditional Uses (uses possible where consistent with resource capabilities and purpose of Management Unit):

1. Activities identified in IA and IB and in 2A and 2B above provided available development areas are not limited unnecessarily;

2. Water-related uses not requiring fill;

3. Nondependent, nonrelated uses not requiring fill;

4. Water-dependent uses requiring fill (fills must be evaluated as per Goal 16);

5. Inwater disposal of dredged material (as per fill requirements of Goal #16).

DESIGNATION OF ESTUARINE MANAGEMENT UNITS

(refer to lettered MUs on attached maps)

A. Development:

1. Extent: North and South jetties

2. Rationale:

a) Developed jetties;

b) Essential for navigation over bar.

3. Discussion: This MU encompasses only the jetties and not any tidal flats which may develop behind them. The nature of a jetty is one of development, as it is so closely tied to the economics of the estuary. Maintenance of the jetties, and their possible future extension, are envisioned in this MU--any change in location of the landward side of the jetty would require that additional land be converted to this MU designation.

B. Development:

1. Extent: The existing Army Corps of Engineers dredging project including "over-dredge" as necessary.

2. Rationale:

a) Essential for navigation needs.

3. Discussion: The Siuslaw River is typical of coastal waterways which have historically been used as transportation routes. Over the years, numerous public and private investments based on the river have been made for both industrial and recreational purposes. The continued use of these facilities is dependent on maintenance of the navigation channel.

LCDC has designated the Siuslaw a "shallow draft" estuary, defined as having channels of 22 feet or less. The river's shallow nature and high rate of natural sedimentation, augmented by runoff associated with timber harvest activity, cause sedimentation and shoaling to be a major problem for existing navigational users.

C. Natural:

1. Extent: Specifically indicated on 1"=1,000' scale map. Generally--north side of the river from the entrance channel to Cannery Hill.

2. Rationale:

a) Fish rearing (particularly fall chinook juveniles) and spawning;

b) Seal haulout at upriver portion;

c) Clam beds with species found only at this salinity level (i.e., piddock, gaper, cockle, and littleneck) predominantly outside of jetty;

d) Seagrass and algae beds predominantly in Piddock Bay area;

e) Aquaculture facility;

f) Area of high quality biological habitat with unique consolidated substrate;

g) Low-intensity recreational potential.

h) Heavy shorebird use in cove areas.

3. Discussion: The salinity range in this MU near the mouth of the river is much higher than the remainder of the estuary since the Siuslaw has a strong riverine influence. This factor causes the organisms found here to be much different than those in the remainder of the estuary. Seals are known to use the Cannery Hill area as a haulout and oceanic fishes can be found feeding here. The sand substrate is of high value for fish

rearing, including fall chinook juveniles. The recreational and economic importance of this area extends beyond the limits of the MU because of this fish rearing capacity. The abundance of clams is also of high recreational value.

D. Natural:

1. Extent: Exact boundaries on 1"=1,000' scale map. The tideflats at the mouth of the North Fork of the Siuslaw.

2. Rationale:

a) Extensive seagrass beds;

b) Benthic fauna, such as softshell and macoma clams and shrimp;

c) Major tract of tidal marsh and productive tideflats;

d) Shorebird use;

e) Low-intensity recreational importance.

3. Discussion: The extensive seagrass beds associated with this MU, aside from being extremely important for nutrient exchange, provide an excellent habitat for many organisms--both by direct attachment and as a result of its stabilizing effect on the substrate (W&H). One benefit of this biologically rich condition is excellent fish habitat. Furthermore, the tidal flats, because of their close proximity to the population center, are one of the most heavily used sites for recreational clam digging.

The Siuslaw has approximately 750 acres of tidelands, about 20% of the river's total estuarine habitat. Only the Salmon and Chetco River estuaries have smaller percentages of tidelands (OCCDC, Fish and Wildlife). Because of the unique value of these lands for nutrient productivity and biological habitat, combined with the scarcity of tideland in the Siuslaw, the importance of a NATURAL designation on this area is apparent.

E. Natural:

1. Extent: Exact boundaries shown on 1"=1,000' map. The North Fork salt marshes.

2. Rationale:

a) Major tracts of undisturbed marsh;

b) Diverse assemblage of marsh types;

c) Pure sedge marsh island (50 acres).

3. Discussion: This area is considered biologically important because of the proximity of four marsh types: mature high marsh, immature high

marsh, sedge marsh, and sedge and bulrush marsh. The sedge and sedge/bulrush marshes are in good to excellent condition, but portions of the mature and immature high marshes have received considerable grazing pressure. However, it is important that grazing be limited to that level which will allow the marsh to retain its natural characteristics.

The sedge marsh island is particularly unique due to its extensiveness and purity.

These marshlands, all within the Siuslaw Estuary, are a major source of detritus (organic debris resulting from plant decay), and supply a key link between primary and secondary productivity in the marine ecosystem. They also play an important role in the estuarine system in prevention of siltation and erosion, absorption of pollutants, and in flood control.

F. Natural:

1. Extent: Specific boundaries shown on 1"=1,000' map. Includes tidelands from Glenada east to and including Cox Island and South Slough.

2. Rationale:

   a) Extensive marshes Cox Island, South and Siboco Sloughs;

   b) Seagrass beds throughout the MU;

   c) Herring spawning at Glenada Flats;

   d) Swan wintering grounds;

   e) Waterfowl feeding and resting grounds during fall migration;

   f) Productive softshell clam beds;

   g) Fish rearing throughout MU;

   h) Wildlife value--including fur-bearers.

3. Discussion: The Siuslaw has one of the largest expanses of salt marshes in the state, even though it has a shortage of mudflats. It is preceded only by Coos Bay and the Columbia River for salt marshes (OCCDC Fish and Wildlife). It is also a very diverse marsh system, as exemplified by the marshes in this MU.

   Although no estuary could survive with all efforts toward protection aimed solely at one isolated portion, because this MU is the largest undisturbed area within the system, its retention in a natural state is given highest priority. Cox Island has recently been donated to the Nature Conservancy with their intent being to keep it in its excellent natural state.

Glenada Flats and the area adjacent to Rose Hill are used as spawning grounds for herring. As this fish is important both recreationally and as forage for other fish (OCCDC Fish and Wildlife), these spawning grounds should remain unaffected.

G. Natural:

1. Extent: Exact boundaries shown on 1"=1,000' scale map. The small marsh immediately west of Murphy's Mill.

2. Rationale:

a) Seagrass bed;

b) Healthy tideflat adjacent to industrial use;

c) Shorebird use;

d) Fish rearing;

e) Abundant benthic organisms.

Discussion: Although small, this tideflat is in a healthy state. Productivity rates are probably high due to the presence of eelgrass, an excellent habitat for several species, as well as a source of detritus. Its proximity to the mill indicates that the two can compatibly coexist.

H. Natural:

1. Extent: The mostly undiked area of high salt marsh at the extreme western tip of Duncan Island. Includes parts of 18-11-21-100 and 18-11-21-200. Exact boundaries shown on 1"-1,000' scale map.

2. Rationale:

a) Major tracts of essentially undisturbed high salt marsh;

b) Bulrush and sedge communities;

c) Unique wildlife and aquatic values.

3. Discussion: This marsh area contains both high salt marsh and sedge and bulrush communities. It is adjacent to diked agricultural grazing lands and probably offers these lands some degree of erosion protection. Absorption of pollutants and protection of the channel area from sedimentation are important functions of this marsh type.

I. Natural:

1. Extent: Exact boundaries on 1"=1,000' scale map. Marshes on the east end of Duncan Slough Marshes.

2. Rationale:

a) Unusual vegetation grouping, major marsh tract;

b) Band-tailed pigeon mineral springs habitat;

c) Waterfowl use area;

d) Fish rearing grounds.

3. Discussion: This large bulrush/canary grass marsh is in a transition zone between fresh and salt water; causing an unusual grouping of marsh plants. The slough is biologically significant to fish, waterfowl and band-tailed pigeons.

Although the band-tailed pigeon is not a threatened species, the mineral springs, an essential habitat for these birds, are somewhat rare. This particular springs serves the pigeon population of an approximately 20-mile radius and one may observe over 1,000 migrating band-tails on a late summer day (Carlson, ODFW).

J. Conservation:

1. Extent: The Estuary from the jetty to the Highway 101 bridge, excluding MU-C and that portion of the Estuary within the city limits of Florence.

2. Rationale:

a) Groin tideflats;
b) Old Rock Dock;
c) Recreational use;
d) Fish rearing and feeding.

3. Discussion: This portion of the Estuary is ocean dominated, with high salinity levels. This makes it an important area for marine species who either are reared here or use this as feeding grounds. This is also an important site for benthic (bottom-dwelling) organisms which prefer a sand environment. The old Rock Dock site is located adjacent to the South Jetty. Many agencies and local persons are concerned with rebuilding this recreational structure.

K. Conservation:

1. Extent: The Estuary from Highway 101 bridge east to the western tip of Duncan Island - also extending up the North Fork to the north boundary of MU-E. This excludes the areas covered by MUs B, D, E, F and G and lands within the city limits of Florence.

2. Rationale:

a) Smaller tracts of tideflats and marshes;
b) Fishing, boating;
c) Private and commercial docks.

3. Discussion: This heavily used portion of the Estuary is important for recreational and economic needs of the area. It is biologically

important, also, both in its own right and by virtue of its proximity to several NATURAL areas of the Estuary. Proposed uses should be carefully evaluated based on the limited surface area of the Estuary and the fragility of the ecosystem.

L. Conservation:

1. Extent: From the western tip of Duncan Island upstream to the head of tide; excluding MUs I and H. Also on the North Fork from the north boundary of MU-J to the head of tide.

2. Rationale:

a) Recreational uses;
b) Fringe marshes and eelgrass beds.

Discussion: Recreation is the most important use of the Estuary in this area, although barging and log rafting also take place here. Fringe marshes are important sources of nutrients and should be respected. Docks should be consolidated whenever possible to cut down on occupation of the water surface.

MINOR ESTUARIES

Five minor estuaries have been identified and classified in Lane County - Siltcoos River, Sutton Creek, Berry Creek, Big Creek and Tenmile Creek. Other creek outlets were found not to possess sufficient estuarine qualities to warrant classification.

All five minor estuaries are classified as "Natural" based on LCDC Administrative Rule (9/13/77) and therefore have only the NATURAL Management Unit.

The Siltcoos River and Big and Tenmile Creek minor estuaries are shown, along with their shorelands management units, on the 1"=1,000' maps accompanying this report. A discussion of the shorelands management units for these estuaries can be found on page _____ of this report.

(1) Siltcoos River:

This is the largest of the minor estuaries in Lane County. Tidal influence extends upstream to at least the International Paper Company Dam located about a mile inland. At extremely high tides (9-10 foot) tidal influence may extend to the inlet of Siltcoos Lake. It is a shallow, sandy-bottomed estuary with a salt marsh of approximately six acres on the north side about a half mile from the ocean. This marsh and other portions of the estuary receive heavy use by waterbirds. A rare bird, the snowy plover, resides in foredunes near the lower estuary. Several species of marine and anadromous fish utilize the estuary for rearing and migration. Coho Salmon, steelhead and sea-run cutthroat are the primary anadromous fish.

Freshwater contribution to the estuary is manipulated by flows released from the dam gates or fish ladder. Autumn storms at times form a sand bar at the beach, blocking river outflow and anadromous fish migrations. Large,

temporary, releases of water from the dam are commonly used to flush open this sand barrier. Physical means of removing the sand barrier may be necessary to facilitate fish movement and would be permitted in this minor estuary.

(2) Berry & Sutton Creeks:

These are listed together as they have similar characteristics. Their interaction with the ocean covers broad sandy areas of beach, with mixing occurring over many acres for several hundred feet inland from the ocean at higher tide. These estuarine areas attract large numbers of shorebirds that feed on invertebrates and small fish. Both creeks support anadromous fish runs.

Both estuaries are relatively isolated although the Forest Service has a recreation area on Sutton Creek near its mouth. Both creeks have stands of riparian vegetation near the beach with Sutton Creek being much more dense. The strips of vegetation adjacent to Sutton Creek have been designated critical wildlife habitat by the Siuslaw National Forest.

The Sutton Creek estuary is within the Siuslaw National Forest's Sutton Lake recreational area. Much of Berry Creek estuary is presently on private property currently undergoing condemnation procedures by the US Forest Service.

(3) Big Creek & Ten Mile Creek:

These two creeks, located on the northern Lane County coast, run directly from the Coast Range with small, narrow estuaries at their mouths. Highest tides extend roughly 300 yards upcreek from the Highway 101 bridges. They both have fringe marsh areas of wildlife importance along these tidal portions.

Anadromous fish runs occur in both creeks, making maintenance of their water quality of prime importance. Coho, steelhead and sea-run cutthroat are the main anadromous species present.

Large numbers of shorebirds are attracted to the mouths of these creeks to feed on small aquatic life forms which live in this salinity range. Both creeks have minimum stream flows appropriated in order to protect fish and wildlife during summer low flow periods.

CHAPTER IV

Goal 17 - COASTAL SHORELANDS

INTRODUCTION

Coastal shorelands, like the estuaries, are a unique and sensitive component of the coastal environment. The shorelands are valuable for the protection and maintenance of water quality, fish and wildlife habitat, recreation and a variety of water-dependent uses. Hence, they are an important environmental, aesthetic and economic resource. Planning policies for these areas must ensure the protection and wise management of this resource. Additionally, because of the natural hazards associated with shoreland areas, regulations must be developed to reduce the potential hazards to human life and property. Lane County has designated these areas into management units (MUs) in order to protect the unique natural values of shoreland areas, promote water quality and to provide for economic use of shoreland resources consistent with natural limitations.

PLANNING AREA

All shorelands within 1,000 feet of the estuary, 500 feet of all coastal lakes and all lands west of Highway 101 were inventoried to determine the nature, location and extent of geologic and hydrologic hazards and shoreland values. These values include fish and wildlife habitat, economic resources, recreational values and aesthetics. This inventory information is documented in Lane County Coastal Resource Inventory and accompanying maps compiled by Wilsey and Ham. Based on this information, shorelands areas were designated into management units if the inventory information indicated these to be: (1) lands which limit, control or are directly affected by the hydraulic action of the coastal water body, including floodways; (2) adjacent areas of geologic instability; (3) natural or man-made riparian resources; (4) areas of significant shoreland and wetland biological habitat; (5) areas necessary for water-dependent and water-related uses; (6) areas of exceptional aesthetic or scenic quality if derived from association with coastal water areas; and (7) coastal headlands. In most cases shorelands within the planning area met the above criteria and were placed within management units. Where physical barriers such as highways or railroads effectively limit the impact of shorelands areas on the water body, the areas were excluded from management unit designation.

Lands west of Highway 101 south of the Siuslaw River were not placed in coastal shorelands management units since the area is within the Dunes National Recreation Area managed by the US Forest Service. Any development within this area is subject to requirements of the Beaches and Dunes portion of this document as the entire area is dune sheet.

Lands west of Highway 101 north of the Siuslaw River and south of Lily Lake were not placed in coastal shorelands management units for similar reasons. Much of the area is within the Sutton Lake Composite of the Siuslaw National Forest. The remaining land is subject to the requirements of the Beaches and Dunes portion of this document. Management units were designhnated around coastal

lakes in these Beaches and Dunes areas, acknowledging the particular sensitivity of these water bodies to development, and the action of sand dunes.

MANAGEMENT UNITS

Lane County's shorelands have been divided into five different management units: Prime Wildlife Area, Significant Natural Area, Natural Resource Preservation, Residential Development and Mixed Development. These management units contain policies which both protect the unique values of the shoreland MU and which protect the coastal water body from impacts related to shoreland uses. These management units are implemented by means of overlay zoning districts which provide performance criteria which are in addition to the requirements of the underlying zoning district.

The following section defines and sets use priorities for these MUs. The section is divided into four categories: Estuarine Shorelands, Minor Estuarine Shorelands, Coastal Lakes and Lands West of Highway 101. The numbers of the individual management units correspond to the maps accompanying this report.

MANAGEMENT UNIT DEFINITIONS:

Prime Wildlife Area

Prime Wildlife Area includes areas of unique biological assemblages, habitats for the preservation of rare or endangered species and the maintenance of a diversity of wildlife species. These include areas of essentially unspoiled riparian vegetation and freshwater wetlands as identified in the Lane County inventory information. Species which inhabit these wildlife habitats have special requirements which should be considered to the greatest extent feasible in determining how the land is to be used.

Policies:

1. Uses shall fall within Priority 1 of the General Priority Statement (page 37).

2. Artificial bank stabilization shall be allowed only in unusual circumstances where natural erosion processes are threatening critical wildlife habitat or structures existing October 7, 1977, provided that natural bank stabilization methods have been considered. Riprap used for bank stabilization must meet Army Corps of Engineers strength, size and design criteria unless the County Engineer determines this to be unnecessary and unadvisable.

3. For any approved development in this MU, a minimum 50' horizontal setback from the shoreline of the estuary or coastal lakes is required. Ocean shoreland setback will vary depending on current rate of erosion and will require a site review. Implementation will include the following:

    a. Existing lots which are too small to accommodate both the required Management Unit setback, the construction of a residence and other development requirements such as septic and replacement fields which will be allowed to build in this setback zone following a County site inspection, providing clearance of vegetation on the remainder of the

lot is kept to an absolute minimum and other County requirements are met.

b. Within the 50' setback, 30' adjacent to the shore shall be left in natural vegetation. Brush may be removed from the remaining 20' if revegetated and decks and similar structures may project into this area.

c. Within the 30' of natural vegetation the following kinds of modifications are allowable:

1) Unsurfaced foot paths;

2) Removal of hazardous vegetation such as unstable streambank trees or trees otherwise vulnerable to blowdown may be allowed in unusual circumstances following review by the County or Oregon Department of Fish and Wildlife. Streambank trees, snags and shorefront brush are necessary for wildlife habitat.

3) Replanting of areas modified in "c." above or other areas which have been previously cleared.

4. Development shall not result in the clearance of natural vegetation in excess of that which is necessary for the actual structure/s, required access, fire safety requirements and the required septic or sewage disposal system. Parcels which exhibit vegetation-free areas suitable for development should utilize such areas for the building site where feasible. Areas of excessive vegetation removal shall be replanted as soon as possible.

5. State Fish and Wildlife biologists shall have a 14-day "review and comment" period to evaluate the impact of any development on critical habitats and to make suggestions concerning ways to avoid or mitigate identified adverse impacts.

6. Filling in coastal lakes adjacent to this MU not allowed.

7. Development on lots less than five acres in size shall be prohibited. Where lots less than five acres existed on the date of adoption of this report, development may occur if in conformance with the requirements of the parent zone and this management unit.

8. Timber harvesting shall be consistent with Forestry Practices Act rules. Lane County recommends to the Oregon State Board of Forestry that no timber harvesting activities be allowed in the Prime Wildlife Area under the Forest Practices Act without prior consultation with Oregon Department of Fish and Wildlife to determine a harvest plan which will result in the least impact on wildlife inhabiting the designated area.

9. No dredge spoils deposition shall be allowed in the Prime Wildlife managment unit.

10. No new single-family, single-purpose, piling-type piers shall be allowed. Mooring buoys, floating piers, launching ramps and dryland storage are potential alternatives. When this MU exists adjacent to a natural estuarine

MU, no pier development is allowed. Existing or previously existing docks or piers may be rebuilt, but not expanded, if destroyed.

11. Land division, including subdivisions and major or minor partitions shall be allowed outside of urban or urbanizable areas only upon a finding by the governing body of the County that such uses satisfy a need which cannot be accommodated at other upland locations or in urban or urbanizable areas and that all other requirements of this management unit are met.

12. The filling in of freshwater marshes within this management unit is not allowed.

Significant Natural Area:

This management unit designates an area which may have a combination of physical, social or biological characteristics which set it apart as essential to maintain in its natural state. These characteristics range from a municipal watershed to the cultural and social value of the sand dunes on the south shore near the mouth of the Siuslaw River. These areas serve multiple purposes, among which are education, preservation of habitat diversity, aid in water quality maintenance, and provision of intangible aesthetic benefits. This management unit takes a broader range of possibilities into account than strictly the biological values of an area.

Special Conditions

1. Uses shall fall within Priority 1 of the General Priority Statement (page 37).

2. Artificial bank stabilization shall be allowed only to protect structures existing as of October 7, 1977 and only after other methods of bank stabilization which are less destructive to the resource have been considered, or unless the unique value of the resource itself is in danger.

3. Dredge spoil disposal appropriate only on the dunes in MU along the estuary, as indicated in the Siuslaw Dredged Material Disposal Plan.

4. Development shall not result in the clearance of natural vegetation in excess of that which is necessary for the actual structure/s, required access, fire safety requirements and the required septic or sewage disposal system. Parcels which exhibit vegetation-free areas suitable for development should utilize such areas for the building site where feasible. Areas which experience excessive vegetation removal shall be replanted as soon as possible.

5. Filling in coastal lakes adjacent to this MU not allowed.

6. Timber harvesting activities shall be consistent with Forestry Practices Act rules and shall respect the scenic and biologic values of the MU.

7. Land division, including subdivisions and major or minor partitions, shall be allowed outside of urban or urbanizable areas only upon a finding by the governing body of the County that such uses satisfy a need which cannot be

accommodated at other upland locations or in urban or urbanizable areas and are compatible with the other requirements of this management unit.

8. Development on lots less than ten acres in size shall be prohibited. Where lots less than ten acres existed on the date of adoption of this report, development may occur if in conformance with the requirements of the parent zone.

9. For any approved development on coastal lake or estuarine shoreland in this management unit, a minimum 100' building setback from the shoreline is required wherever practicable. Setback requirements on ocean shorelands in this MU will vary depending on the rate of erosion at the site and will require a County site review. Furthermore:

   a. A band of natural vegetation no less than one-half the width of the setback shall be left in natural vegetation.

   b. Existing lots which are too small to accommodate both the required management unit setback, the construction of a residence and other development requirements such as septic and replacement fields will be allowed to build in this setback zone following a County site inspection providing clearance of vegetation on the remainder of the lot is kept to an absolute minimum and other County requirements are met and hazard to life and property is minimal and acceptable.

   c. Within the shoreside belt of natural vegetation the following kinds of modifications are allowable:

      1) Unsurfaced foot paths;

      2) Removal of hazardous vegetation such as unstable streambank trees or trees otherwise vulnerable to blowdown may be allowed in unusual circumstances following review by the County or Oregon Department of Fish and Wildlife. Streambank trees, snags and shorefront brush are necessary for wildlife habitat.

      3) Replanting of areas modified in "c." above or other areas which have been previously cleared.

10. No new single-family, single-purpose docks or piers shall be allowed. Mooring buoys, floating docks, launching ramps and dryland storage are potential alternatives. If this MU is adjacent to a natural estuarine MU, no further pier development is allowed. Existing or previously existing docks or piers which are destroyed may be replaced but not expanded.

11. New development proposed for this management unit shall blend to the maximum degree feasible with the surrounding vegetation and topography in terms of color, form and location. Design and site shall be reviewed to ensure that visual harmony is achieved consistent with the purposes of the management unit.

12. The filling in of freshwater marshes within this MU is not allowed.

Natural Resources Preservation:

This designation is provided to allow for human activities dependent upon long-term use of natural resources--primarily agricultural and silvacultural--in harmony with natural systems of the coastal shorelands and waters. While this designation is not intended to entirely preempt change, it is meant to ensure that all changes occur with recognition of and respect for those natural systems. Activities which enhance the renewable resources are encouraged, as well as recreation and public access to the coastal waters.

Policies:

1. Uses shall fall within, and respect, Priorities 1-4 of the General Priority Statement (page 37).

2. Dredge spoil disposal must provide adequate runoff protection and, wherever possible, maintenance of a riparian strip along the water. Those sites adopted as part of the Siuslaw River Dredged Material Disposal Plan are automatically approved.

3. Artificial bank stabilization shall be used only to protect public and private roads, bridges or railroads, or when natural erosion processes are threatening a structure which existed on October 7, 1977.

4. Construction or expansion of single-family, single-purpose piers is discouraged in favor of multiple-use, public or commercial piers. Mooring buoys, floating piers, launching ramps and dryland storage are potential alternatives. If this MU exists adjacent to a natural estuarine MU, no pier development shall be allowed. Existing or previously existing piers may be replaced if destroyed.

5. Filling in coastal waters adjacent to this MU shall be allowed only in very rare instances and after a complete study of potential physical or biological impacts upon the lake. The cumulative effects of all such fills shall be considered. Positive benefits must outweigh negative effects.

6. Forestry and agricultural practices shall take place in such a manner as to retain the flexibility of future shore land uses and to maintain the natural integrity of the estuary.

   Lane County recommends adoption of Forestry Practices Act rules requiring strict maintenance of riparian vegetative fringe on coastal rivers, lakes and tributaries consistent with the requirements of LCDC Goals 16 and 17 which require state agencies to take action to minimize man-induced sedimentation.

7. Land division, including subdivisions and major and minor partitions, shall be allowed outside of urban or urbanizable areas only on a finding by the governing body of the County that such uses satisfy a need which cannot be accommodated at other upland locations or in urban or urbanizable areas and are compatible with the other requirements of this management unit.

8. For any approved development on coastal lake or estuarine shoreline in this MU, a minimum 50' building setback from the shoreline is required. Setback

requirements on ocean shorelands in this MU will vary depending on the rate of erosion in the area and will be determined by County site review. Furthermore:

a. Within the 50' setback, 30' adjacent to the shore shall be left in natural vegetation. Brush may be removed from the remaining 20' if revegetated and decks and similar structures may project into this area.

b. Existing lots which are too small to accommodate both the required management unit setback, the construction of a residence and other developed requirements such as septic and replacement fields will be allowed to build in this setback zone following a County site inspection providing clearance of vegetation on the remainder of the lot is kept to an absolute minimum and other County requirements are met and hazard to life and property is minimal and acceptable.

c. Within the 30' of natural vegetation the following kinds of modifications are allowable:

1) Unsurfaced foot paths;

2) Removal of hazardous vegetation such as unstable streambank trees or trees otherwise vulnerable to blowdown may be allowed in unusual circumstances following review by the County or Oregon Department of Fish and Wildlife. Streambank trees, snags and shorefront brush are necessary for wildlife habitat.

3) Replanting of areas modified in "c." above or other areas which have been previously cleared.

9. The District Forester of the Oregon Department of Forestry shall have a 14-day "review and comment" period to evaluate the impact of development proposed on lands zoned for timber production within the management unit. The DOF may make suggestions concerning ways to avoid or mitigate adverse impacts.

Residential Development:

This designation recognizes that there are certain shoreline areas which have been committed to residential use by their development patterns over many years. The underlying assumption of this MU is that the low-density residential character should remain undisturbed. Preservation and enhancement of riparian vegetation is a necessity along the estuary and coastal lakes, regardless of any development. Although this designation does limit the available shoreland for water-dependent uses, the existing character, whether through actual development or platting of subdivision lots, takes precedence and adds diversity to the shorelands.

Policies:

1. Uses shall fall within, and respect, Priorities 1 and 4 of the General Priority Statement (page 37).

2. A minimum building setback of 50' from the shoreline of coastal lakes or estuaries shall be required. The shoreward 30' of this setback area shall be maintained in natural vegetation wherever currently existing. Where not presently existing, it should be encouraged to develop. Setback needs along ocean shorelands will vary due to rate of erosion in the area and will require a County site review. Furthermore:

   a. Existing lots which are too small to accommodate both the required management unit setback, the construction of a residence and other development requirements such as septic and replacement fields will be allowed to build in this setback zone following a County site inspection providing clearance of vegetation on the remainder of the lot is kept to an absolute minimum and other County requirements are met and hazard to life and property is minimal and acceptable.

   b. Within the shoreside belt of natural vegetation the following kinds of modifications are allowable:

      1) Unsurfaced foot paths;

      2) Removal of hazardous vegetation such as unstable streambank trees or trees otherwise vulnerable to blowdown may be allowed in unusual circumstances following review by the County or Oregon Department of Fish and Wildlife. Streambank trees, snags and shorefront brush are necessary for wildlife habitat.

      3) Replanting of areas modified in "c" above or other areas which have been previously cleared.

3. Construction or expansion of single-family, single-purpose piers is discouraged in favor of multiple-purpose, public or commercial piers. If destoyed, existing or previously existing docks or piers may be rebuilt but not expanded.

4. Dredge spoil disposal sites approved as part of the Siuslaw River Dredged Material Disposal Plan are automatically approved and need no additional review.

5. Filling in coastal lakes adjacent to this MU not allowed.

6. Land division, including subdivisions and major or minor partitions, shall be allowed outside of urban or urbanizable areas only upon a finding by the governing body of the County that such uses satisfy a need which cannot be accommodated at other upland locations or in urban or urbanizable areas and are compatible with the other requirements of this management unit.

Mixed Development:

This MU recognizes the value of commercial and industrial activities to the economic and recreational interests of the area. Existing mixed uses are located in this MU where appropriate, including existing residential uses in close proximity to commercial or industrial uses. For development purposes, shorelands have been divided by LCDC Goal #17 into two categories: 1) urban and urbanizable lands and 2) rural lands. Urban areas are managed by the City of

Florence or Dunes City, therefore Lane County deals with urbanizable and rural shorelands. The very limited nature of available appropriate land for any commercial or industrial activity of a water-dependent nature places a great burden on the governing body to responsibly allocate any available lands for these uses. The long-term economic health of the area should dominate a short-term personal gain. Although none of the shorelands areas designated as Mixed Development in this report are within urbanizable areas, areas so designated are already partially committed to water-dependent or water-related industrial or commercial uses. Their close proximity to the dredge channel dictates that these lands should be preserved for the expansion of existing industrial or commercial uses or for future water-dependent or water-related uses. However, such development will only be allowed upon a finding by the governing body of the County that such uses satisfy a need which cannot be accommodated within urban or urbanizable areas.

Policies:

1. Uses shall respect the priorities set out in the General Priority statement (page 37).

2. All lands within this management unit which have the potential for water-dependent commercial and industrial and water-related uses have priority over other uses within this management unit. However, new water-related and water-dependent development shall be allowed only upon a finding by the governing body of the County that such uses cannot be accommodated within an urban or urbanizable area.

3. Short-term economic gain or convenience in development shall be evaluated in relation to potential long-term effects on the estuary and shoreland, as well as the long-term economy of the area.

4. Promotion of visual attractiveness shall be a consideration in any commercial or industrial development.

5. Natural riparian vegetation will be maintained or encouraged wherever possible, for the purposes of erosion control, bank stabilization, maintenance of water quality and temperature, and general aesthetics.

6. Construction or expansion of single-family, single-purpose piers is discouraged in favor of multiple-use, public or commercial piers. If destroyed, existing or previously existing docks and piers may be rebuilt but not expanded.

7. Dredge spoil disposal sites which were approved as part of the Siuslaw River Dredged Material Disposal Plan are automatically approved and need no additional review.

8. Filling in coastal lakes adjacent to this MU allowed only to protect water-dependent uses and only after a complete study of the potential physical or biological impacts upon the lake. Cumulative effects of all such fills shall be considered.

9. New residential development shall be permitted within this management unit only on parcels determined to be unsuited to water-dependent or water-related uses and only if consistent with the parent zoning district.

10. Land division, including subdivisions and major and minor partitions, shall be allowed outside of urban or urbanizable areas only upon a finding by the governing body of the County that such uses satisfy a need which cannot be accommodated at other upland locations or in urban or urbanizable areas and are compatible with the other requirements of this management unit.

GENERAL PRIORITIES:

Five levels of priorities apply to all uses in the shorelands management units. These priorities shall be used to determine the appropriateness of Plan amendments.

Any other use must comply with the following priorities. An exception may be made only upon a demonstration of public need and with a recognition of the cumulative effect of such changes.

Priorities (from highest to lowest):

1. Promote uses which maintain the integrity of estuaries and coastal waters;

2. Provide for water-dependent uses;

3. Provide for water-related uses;

4. Provide for nondependent, nonrelated uses which retain flexibility of future use, do not prematurely or inalterably commit shorelands to more intensive uses, and do not alienate the integrity of estuarine and other coastal waters.

5. Permit nondependent, nonrelated uses which cause a permanent or long-term change in the features of coastal shorelands only upon a demonstration of public need.

   Also, for all shoreline development, approval shall be based, in part, on:

   (a) the critical relationships between coastal shorelands and the resources of coastal waters, and

   (b) geologic and hydrologic hazards associated with the coastal shorelands.

DESIGNATION OF SHORELAND MANAGEMENT UNITS:

Estuarine Shorelands:

(1) Natural Resources Preservation:

   A. Extent: 1000' from the estuary shoreline, extending from the beach on the west, east to Rhododendron Drive, excluding those platted areas adjacent to Horizon Way and Harbor Vista Park; then continues south between the shoreline and Rhododendron Drive to the Florence city

limits.

B. Rationale:

1. Low area back from beach is a valuable aesthetic resource;

2. Terrace subject to landsliding;

3. Adjacent to biologically important part of estuary for clams, fish rearing and seal haulouts;

4. Includes a County park and state-owned parking area;

5. Significant public use of lowland portions for access to beach and jetty;

6. Existing aquaculture.

C. Discussion: The lowland adjacent to the beach is land accreted after construction of the north jetty. Dredge spoil sites #1 and #2, as indicated in the Siuslaw River Dredged Material Disposal Plan (1978) are approved for this unit. As these spoils are primarily clean sand, no apparent conflict exists. Revegetation would return the site to its present condition. A staging area would be located here in the event of construction or expansion of the North Jetty.

Activities which occur in this area should provide for public access to the ocean and jetty as well as be visually in harmony with natural features of the site.

The MU extends only 500' from the shoreline along the terrace, as this encompasses the area with landsliding hazard.

(2) Natural Resources Preservation:

A. Extent: Beginning at the east city limits of Florence between the shoreline and the road. Extends up the west side of the North Fork of the Siuslaw to the head of tide and between the shoreline and the North Fork Road.

B. Rationale:

1. Adjacent to two biologically productive parts of the estuary--North Fork marshes and marshes at the confluence of North Fork and Main Stem;

2. Timber resource on slopes;

3. Existing agricultural use of alluvial plains, some of which are diked salt marshes.

C. Discussion: The southern portion of this MU is adjacent to large salt marsh expanses, while the northern portion includes the timber and agricultural resources.

Naturally occurring sedimentation along the North Fork is greater than the Main Stem, due to the larger alluvial plains which the river meanders through. This natural sedimentation should be disturbed as little as possible as structural controls in one location often increase the erosion problem elsewhere.

To assist in bank stabilization, existing riparian bands should be maintained, or encouraged where not existing.

(3) Natural Resources Preservation:

A. Extent: Running along the east side of the North Fork from the head of the tide to MU 4 and 1000' inland from the shoreline.

B. Rationale:

1. Timber resource on slopes;

2. Agricultural use of alluvial meadows;

3. South boundary adjacent to productive freshwater marsh.

C. Discussion: Encouraging riparian vegetation for bank stabilization is preferable to any form of structural erosion control. Sedimentation induced by timber harvesting should be controlled to the greatest extent possible, due to the close proximity of the large salt marshes on the North Fork.

(4) Significant Natural Area:

A. Extent: The eastern boundary is the east line of property shown as "State Land Board" on map 18-11-19, the northern and western lines are the extent of aquatic vegetation--to be borne out on the land--and MHHW where adjacent to the slough.

B. Rationale:

1. Diverse plant communities;

2. Heavy wildlife use, particularly waterbirds;

3. Uncommon conversion to healthy freshwater marsh;

C. Discussion: It is uncommon for a diked and gated salt marsh to convert so successfully to a freshwater regime with such healthy plant and animal communities (W&H).

The primary purpose for this designation, rather than the PRIME WILDLIFE MU, is due to its restorable nature. However, this marsh should be very critically evaluated, as it probably provides a more important function now in its freshwater state than it could if reverted to tidal influence.

(5) Natural Resources Preservation:

A. Extent: Northern boundary: Property shown as "State Land Board" on map 18-11-19;
South boundary: Highway 126;
East boundary: 1000' inland from the North Fork;
West boundary: shoreline of estuary
Extends inland 1000' along the North Fork and from the Highway to a point 1000' from the estuary along the Main Stem.

B. Rationale:

1. Timber resource;

2. Adjacent to large salt marshes on North Fork.

C. Discussion: There are fairly steep timbered slopes adjacent to both the freshwater marsh and salt marshes. Control of sedimentation is vital for the health of both of those ecosystems.

(6) Mixed Development:

A. Extent: The portions of Tax Lots 18-12-25-1600 and 18-12-25-2001 above the shoreline.

B. Rationale:

1. Existing industrial uses;

2. Suitable for activities which require barge shipping.

3. Close proximity to urban area.

C. Discussion: Although limited space is available for any new use or expansion of existing uses, the area is one of the few suitable for water-dependent industrial use along the estuary (Siuslaw Estuary Plan). This area has been designated as dredge spoil disposal site #22 by the Siuslaw River Dredged Material Disposal Plan (1978).

Recognition should be taken of the proximity to many biologically important areas of the estuary, and contingencies developed for any potentially damaging effects.

(7) Mixed Development:

A. Extent: From the shoreline on the west boundary of 18-11-30-2-1001 east to the point just east of Cushman where the highway adjoins the river.

B. Rationale:

1. Existing industrial and commercial uses.

C. Discussion: Several commercial uses and an industrial site presently exist in this MU, including the community of Cushman. Space is

extremely limited for expansion, including limited parking areas. Dredge spoil site #23 has been designated for this MU in the Siuslaw River Dredged Material Disposal Plan (1978).

The industrial site is adjacent to a small, healthy mudflat. Additionally, a fringe marsh exists along the length of this MU and should be maintained in its natural state.

(8) Natural Resources Preservation:

A. Extent: From the railroad tracks to the highway, beginning on the west where the tracks cross the highway and extending east to a point north of tax lot 18-11-20-601. Also the land from the highway to the river beginning at the west end of 18-11-20-601 east to the east end of 18-11-16-2700.

B. Rationale:

1. Agricultural use of field between highway and river;

2. Marsh between highway and railroad.

C. Discussion: Two distinct parts make up this MU: the marsh north of the highway and an agricultural field. The marsh is freshwater on its east end but tidally influenced on the west.

The field has been recognized as one of the last remaining large agricultural parcels in the Siuslaw estuarine area (Siuslaw Estuary Plan).

(9) Mixed Development:

A. Extent: From the west end of tax lot 18-11-16-1100 east to the east end of tax lot 18-11-15-1202. From the shoreline to the highway.

B. Rationale:

1. Existing commercial use present;

2. No overriding biological concerns;

3. Natural shoreline scour occurs on opposite bank so less danger of erosion.

C. Discussion: Size of area will limit this MU to small-scale uses which should, preferably, be water dependent.

Dredge spoil disposal site #31 is approved for the west end of this MU in the Siuslaw River Dredged Material Disposal Plan (1978).

(10) Natural Resource Preservation:

A. Extent: From the west end of tax lot 18-11-10-601 east to the east end of tax lot 18-11-10-402 and extending from the shoreline to the highway.

B. Rationale:

1. Narrow width from road to river;

2. Freshwater marsh adjacent to highway;

3. Flooding potential.

C. Discussion: Some existing residences are located here. This MU was applied here rather than RESIDENTIAL due to the physical constraints of the property and the freshwater marsh.

Dredge spoil disposal site #32 is approved for a site on the west end of this MU in the Siuslaw River Dredged Material Disposal Plan (1978). This site has little wildlife use and has been filled in the past.

(11) Residential Development:

A. Extent: From the west end of tax lot 18-11-12-600 to the eastern boundary of 18-10-7, and extending from the shoreline to the highway.

B. Rationale:

1. Existing residential use.

2. Freshwater marshes along highway.

C. Discussion: This is a portion of the area known as Tiernan, much of which is subject to periodic flooding. Strips of freshwater marsh such as those located here provide both wildlife habitat and primary production of nutrients that drain into the estuary. Any development activities shall avoid negative impacts on marsh areas. Dredge disposal site #37 is designated for this MU in the Siuslaw River Dredged Material Disposal Plan (1978).

(12) Mixed Development:

A. Extent: From the west end of 18-10-7-700 east to the east end of 18-10-8-700, extending from the highway to the shoreline.

B. Rationale:

1. Major industrial facility;

2. Existing commercial recreational facilities;

3. Extent of dredged channel;

4. Adjacent to turning basin in river.

C. Discussion: The existing activities in this MU and its position in relation to the dredged channel are reasonable cause for a Mixed Development designation. This site is encouraged for uses which require the use of the river for transportation. Dredge Disposal Site #40 is

approved for this MU in the Siuslaw River Dredged Material Disposal Plan (1978).

(13) Mixed Development:

A. Extent: Those tax lots in section 18-10-9 which lie between the highway and the railroad tracks.

B. Rationale:

1. Isolated from estuary by highway;

2. Industrial zoning;

3. Good access.

C. Discussion: Although industrially zoned, this property has some severe physical constraints, primarily its being low and wet, which may hinder development. Presuming these constraints can be overcome, development should not negatively affect the estuary with any detrimental runoff. Dredge disposal sites #47 and #48 have been approved for this MU in the Siuslaw River Dredged Material Disposal Plan (1978). Whatever use is proposed for this should take into account its aesthetic impact, particularly visual impact from the highway.

(14) Natural Resource Preservation:

A. Extent: From the east line of tax lot 18-10-8-700, east to the east line of 18-10-11-2305. Runs between the shoreline and the highway except at the extreme east end where the southern boundary is formed by the south line of 18-10-10-2305.

B. Rationale:

1. Agricultural use;

2. Wildlife value.

C. Discussion: A natural drainageway along the highway has been inundated in wet periods, restricting access to homes along the river. This slough is used by waterfowl and has value as fish habitat, particularly for Bluegill.

(15) Mixed Development:

A. Extent: Beginning at a line which is the westerly extension of the south boundary of 18-10-11-2305, including the land from that line to the shoreline. Also including all land between the highway and MHHW from the west boundary of 18-10-11-2402 north to the bridge and including the following lot north of the bridge: 18-10-2-42-1302.

B. Rationale:

1. The commercial section of Mapleton, a minor development center;

2. Major industrial facility;

3. Public facilities;

4. Scattered residential use.

C. Discussion: This is the site of the oldest portion of the community of Mapleton, and is still the commercial center. Flooding is the major constraint to any new development here. Although a community water supply is available, lack of sewers is also a constraint for many types of commercial or industrial uses. The river is not used for barge traffic this far up, but recreational use of the river is high. Recreational access is a priority for waterfront development. Dredge Disposal Site #44 is designated for the extreme southwest portion of this MU in the Siuslaw River Dredged Material Disposal Plan (1978).

(16) Residential Development:

A. Extent: From the Highway 126 bridge, excluding 18-10-2-42-1302, north to the east-west centerline of 17-10-34 extending between Highway 36 and the shoreline.

B. Rationale

1. Existing residential use.

C. Discussion: This area has been in residential use for over 60 years, gradually filling in with houses and mobile homes. Flooding is the major constraint to continued residential use and is a concern with every proposed development. Riparian vegetation should be maintained or encouraged to aid in bank stabilization. Dredge Disposal Site #45 has been designated for this MU in the Siuslaw River Dredged Material Disposal Plan (1978)

(17) Residential Development:

A. Extent: Beginning at the east-west centerline of 17-10-34, extending south along the east side of the river, 1000' from the shoreline to the north line of 18-10-1-400.

B. Rationale: Existing residential use.

C. Discussion: This has historically been a residential area, although some areas, like much of Mapleton, may be subject to flooding.

(18) Natural Resource Preservation:

A. Extent: Beginning at the north line of 18-10-1-400 south to the east line of 18-10-10-1401 and extending from the shoreline to East Mapleton Road and South Bank Mapleton Road.

B. Rationale:

1. Low, subject to flooding.

C. Discussion: This land is subject to inundation from both the Siuslaw and from Knowles Creek north of Highway 126. This factor and septic suitability are major constraints to development here.

(19) Residential Development:

A. Extent: Beginning at the east line of tax lot 18-10-10-1401 and extending west to the west line of 18-10-9-1200; from the shoreline to South Bank Mapleton Road.

B. Rationale:

1. Three platted subdivisions;

2. No overriding biological concerns.

C. Discussion: The area has been platted for many years, with improvements existing on a number of the lots. The riparian band along the river should be maintained or encouraged where not existing. Flooding may be a constraint. Dredge Disposal Site #43 has been designated for this MU in the Siuslaw River Dredged Material Disposal Plan (1978).

(20) Prime Wildlife Area:

A. Extends from the shoreline of the estuary to either South Bank Mapleton Road or 65' inland, whichever is less, and runs from the eastern tip of Duncan Island downstream to Lawson Creek.

B. Rationale:

1. Wildlife Use - permanent and transitory;

2. Water quality;

3. Riparian vegetation;

4. Freshwater marshes;

5. Natural barrier of road along majority of MU.

C. Discussion: A richly vegetated area, this MU serves to enhance bank stability and water quality as well as providing wildlife habitat. Filling is not consistent with the purposes of this MU, whether in the freshwater marshes or on the higher ground, except for the extreme northwest corner of 18-11-14 between Duncan Slough and South Bank Mapleton Road West which has approval to be used as a dredge spoil disposal site (Site #34) as designated in the Siuslaw River Dredged Material Disposal Plan. (1978)

(21) Prime Wildlife Area:

A. Extent: From Lawson Creek downstream and around South Slough to the eastern boundary of 18-12-35. This band extends 65' feet inland from the shoreline of the estuary, except in 18-11-29, where it contains a five-acre heron rookery, which is shown generally on the maps accompanying the report.

B. Rationale:

1. Water quality;

2. Wildlife use - permanent and transitory;

3. Steep slopes;

4. Aesthetic values;

5. Critical marsh habitat;

6. Established Great Blue Heron rookery.

C. Discussion: Much of this MU is steep adjacent to the shore. Many perching birds and fur-bearing mammals make use of this setting. Controlling erosion from timber harvesting upland is a major concern in this designation, as well as maintenance of bank stability. Maintaining this strip of natural vegetation enhances the visual quality, as well as the biologic quality of the estuarine area. Prior to any logging activities in or adjacent to the Heron rookery identified in this management unit the State Department of Fish and Wildlife should be consulted regarding methods of minimizing the impact on this unique habitat area.

(22) Natural Resources Preservation:

A. Extent: From the north-south centerline of 18-10-9 extending west to the east boundary of 18-12-35 and upland 300 feet from the shoreline of the estuary, with the exception of those lands included in MUs 20 and 21. This management unit extends further than 300 feet at Lawson, Hoffman and Sweet Creek where it extends up these creeks to head of tide in a band 65 feet wide on each side of the creeks. The management unit extends up Lawson Creek to the northern line of 18-11-28 TL 600; on Hoffman Creek it extends to 18-10-18-400. On Sweet Creek the management unit extends to the major bend in the creek located at the north/south midpoint of 18-10-16-202.

B. Rationale:

1. Timber resource;

2. Steep slopes;

3. Wildlife value.

C. Discussion: The primary value of this land is as a timber resource. Timber removal from this MU should not result in the exposure of that timber in MUs 20 and 21 to wind damage. If necessary, selective timber removal should be practiced to protect that vegetation adjacent to the estuary. A heron rookery has been identified adjacent to this MU and timber removal and other human activity should respect those rare features.

The Lane County Coastal Resources Inventory (Wilsey and Ham, 1978) identified the entire management unit area as a zone of high debris slide potential. Due to this potential threat to existing and adjacent wildlife and estuarine habitats it is recommended that only selective logging be allowed here and that a significant riparian fringe be maintained along all drainage and waterways and that they furthermore be protected from logging debris deposition and sedimentation. Increased sedimentation will require more frequent channel dredging.

There is currently a log dump at the eastern end of this management unit. A healthy freshwater marsh, of high wildlife value, exists between Sweet Creek and this log dump.

(23) Natural Resources Preservation:

A. Extent: The east end of Duncan Island extending east from the west line of 18-11-11-1400; upland from the shoreline.

B. Rationale:

1. Agricultural use;

2. Adjacent to an unusual low-salinity marsh area.

C. Discussion: The area is currently pastureland which is subject to flooding. The adjacent bulrush marsh on Duncan Inlet is considered unusual due to the vegetation groupings brought about by this particular salinity range (ONHP,1977). Dredge disposal site #36 has been approved for this MU in the Siuslaw River Dredged Material Disposal Plan (1978).

(24) Residential Development:

A. Extent: The central portion of Duncan Island from the west end of tax lot 18-11-11-1400 west to the east end of tax lot 18-11-15-400, and upland from the shoreline.

B. Rationale:

1. Existing residential character.

C. Discussion: Although this area is isolated and portions are subject to flooding, it is a platted subdivision with over 10 residences existing. Additional single-use docks on the north side of the island are discouraged, as an important recreational fishing area exists adjacent to the shore. Native vegetation assists in bank stability and is encouraged to grow where it has been destroyed.

(25) Natural Resources Preservation:

A. Extent: The west end of Duncan Island extending west from the east boundary of tax lot 18-11-15-400, and upland from the shoreline, but excluding much of the extreme western tip of the island.

B. Rationale:

1. Existing agricultural use;

2. Wildlife use.

C. Discussion: Much of the west end of the island, which is tidally influenced and designated as "estuary," is diked and currently used for grazing. Although the dikes resist flooding, the ground is still low and the soils subject to a high water table. Marsh fringes exist along the inlet and into the west end of the MU. Riparian strips are encouraged where not existing.

(26) Natural Resources Preservation:

A. Extent: That portion of 18-11-20 which is south of the estuary and west of the section north-south center line and the contiguous northwest corner of 18-11-29 south to the estuarine intertidal mud flat channel.

B. Rationale:

1. Existing agricultural use;

2. Wildlife use.

C. Discussion: This was diked from estuarine influence many years ago and is currently used as pastureland, with a residence existing here also. There is a dike separating the east and west portions of this MU with many extensive natural channels still remaining in both halves. There is significant wildlife use notwithstanding the grazing use. Dredge Disposal Sites #25 and #25A are approved for this site in the Siuslaw River Dredged Materia Disposal Plan. (1978).

(27) Significant Natural Area:

A. Extent: The small freshwater marsh in the south central portion of 18-11-31 on the east side of South Inlet and which extends from the railroad dike upland to the line of nonaquatic vegetation.

B. Rationale:

1. Permanent wildlife use;

2. Transitory wildlife use.

C. Discussion: This pristine freshwater marsh provides an important winter refuge for birds, as well as a year-round home for many species of

wildlife. This marsh was formed when the railroad cut this inlet off from tidal influence.

(28) Residential Development:

A. Extent: The platted area of Glenada upland from the shoreline, and including the remaining portions of Section 35. The upland limit is as shown on map.

B. Rationale:

1. Community of Glenada;

2. Existing residential character.

C. Discussion: The portion of this MU east of the bridge has more residences existing than on the west, although the amount of land platted is similar. Much of this MU is on a terrace above the river. Neither community water nor sewers are available; both are presently constraints to further residential development. If resolved, residential development is encouraged here. Due to the biological value of the estuary here, particularly herring spawning and the mud flats, water-dependent uses which may alter the estuary are not encouraged. (Archaeological site west of bridge.)

(29) Significant Natural Area:

A. Extent: From the platted portion of Glenada west and north to the north line of 18-12-21, and 1000' inland from the shoreline.

B. Rationale:

1. Exceptional aesthetic value;

2. Within DNRA.

C. Discussion: The aesthetic value of the combination of open dune and Siuslaw River is a valuable resource to the Lane County coastal area, as it is one of the few places that the dunes can be seen from the highway. This can serve to encourage tourist uses of Lane County parks. The Dunes National Recreation Area manages the lands south of the river. Dredge Spoil Site #8 is approved for a portion of this MU in the Siuslaw River Dredged Material Disposal Plan (1978). As these spoils are basically sands blown from this dune, no conflict would arise. The dredged sands are somewhat coarser which enhances stability of the dune prior to any revegetation.

(30) Natural Resources Preservation:

A. Extent: The portions of 18-12-16-300 and 400 which are within 1000' of the shoreline of the estuary.

B. Rationale:

1. Existing recreational activities;

2. Wildlife use.

C. Discussion: This land is managed as part of the Dunes National Recreation Area. Access to the south jetty and the beach are gained from a parking area in this MU. Although the aesthetic importance is as great as that in a "Unique Natural Area" MU to the south, the recreational use is overriding and is encouraged here. The old "rock dock" was located within this MU. Many local people and agencies support the replacement of this structure.

The area east of the jetty is used by harbor seals as a haulout.

Dredge Spoil Site #1A has been designated for this beach area in the Siuslaw River Dredged Materials Disposal Plan (1978) which, if other requirements are met, is consistent with the purpose of this MU. A staging area would be located here in the event of construction or expansion of the South Jetty.

Minor Estuary Shorelands

Siltcoos River

(1) Prime Wildlife Area:

A. Extent: From the mouth extending up both sides of the river to the Dunes City city limits at a width of 65 feet measured horizontally from the shoreline, except that this MU is extended to 500' in width for the first 200 yards upriver from the mouth.

B. Rationale:

1. Snowy plover habitat on foredunes near the lower estuary.

2. Heavy waterfowl and other wildlife use.

C. Discussion: This estuary is a portion of the Dunes National Recreation Area (NRA). The Forest Service NRA plan calls for phasing out the Driftwood Campground and limiting vehicle use within 200' of the estuary.

Sutton Creek
Berry Creek

As noted previously, the extent of tidal influence on these creeks is minimal, extending normally no further than the vegetation line on the beach.

Sutton Creek is under the jurisdiction of the Siuslaw National Forest and the Forest Service has designated the riparian vegetation along the creek as critical wildlife habitat.

The shorelands of Berry Creek are under Forest Service and state ownership and are, as such, adequately protected.

Tenmile Creek

1. Prime Wildlife Area

   A. Extent: From the Highway 101 bridge extending upcreek to the eastern boundary of 15-12-34, Tax Lot 200, on the south bank and to the northern boundary of 15-12-34, Tax Lot 500, on the north bank. The width of the MU is 65 feet.

   B. Rationale:

      1. Fringe marshes.

      2. Riparian vegetation.

      3. Wildlife use.

2. Residential Development

   A. Extent: From the Highway 101 bridge extending upcreek to the eastern boundary of 15-12-34, Tax Lot 200, on the south bank and to the northern boundary of 15-12-34, Tax Lot 500, on the north bank and extending outward 500 feet measured horizontally from MU 1.

   B. Rationale:

      1. Existing residential character.
      2. Low water flow in creek during summer months.

   C. Discussion: This area has been in residential use for over 40 years, but has developed to the degree that water availability problems have developed during the summer months.

   D. Policy: No new development shall be permitted within this MU unless the proposed development can demonstrate adequate facilities to store water for a four-month period sufficient to satisfy all domestic uses.

Big Creek

1. Natural Resource Preservation

   A. Extent: Extending upcreek on both sides 900 feet from the Highway 101 bridge at a width of 200 feet measured horizontally from each bank.

   B. Rationale:

      1. Maintenance of water quality.

      2. Riparian vegetation.

      3. Fringe marshes.

      4. Wildlife use.

C. Discussion: This creek supports and anadromous fish runs which depend on both adequate quantities and quality of water. Logging practices within this MU should respect those values as well as wildlife use of the riparian fringe and marsh areas by maintenance of at least a 50-foot buffer zone of riparian vegetation which will also act to minimize sedimentation of the estuary.

Coastal Lakes Shorelands:

Lane County, in conjunction with the Oregon Department of Fish and Wildlife, recommends to the State Marine Board that gas-motor propelled boats be restricted from the following Lane County coastal lakes:

Ackerly	Dune
Alder	Erhart
Bear	Georgia
Buck	Hidden
Clear	Lily
Cleawox	North Georgia
Collard	North Jetty

The above-listed lakes have one or more of the following characteristics which make them inappropriate for high-speed boat usage:

1. Small surface area, generally less than 10 acres;
2. High shoreline erosion potential due to location within the dune sheet;
3. Source of domestic water supply.

Lily Lake:

(1) No MU designation at this time.

Discussion: Lily Lake is an outstanding feature of the northern Coos Bay dune sheet. The visual and aesthetic qualities of the lake setting are a reflection of the great diversity of coastal features present. The County feels that every precaution should be taken to maintain this excellent biological, visual and educational resource.

Both MU designation and zoning have been withheld from the site because it is currently undergoing condemnation for acquisition by the US Forest Service.

Alder Lake:
Dune Lake:
Buck Lake:

(1) Natural Resources Preservation:

A. Extent: 500' from the shoreline of each lake, excluding any lands beyond the boundaries of 17-12-26 or east of Highway 101.

B. Rationale:

1. Existing recreational uses.

C. Discussion: A forest Service campground surrounds Alder and Dune Lakes. Buck Lake is the site of a private trailer park. Although the three lakes are relatively nonproductive due to the sand bottoms and constant encroachment by sand dunes to the west, fish are stocked in all three for recreational purposes. The hiking trail around Alder Lake is quite popular.

Sutton Lake:

(1) Natural Resources Preservation:

A. Extent: The portions of tax lots 17-12-35.2-200 and 17-12-35-300 which fall within 500' of the shoreline. Does not include lands west of Highway 101.

B. Rationale:

1. Existing recreational facility;

2. Marsh fringe.

C. Discussion: A public boat dock maintained by Lane County is located here. Highway 101 runs along the west border of this MU, serving as a buffer to those lands to the west. Sutton Creek originates at this point in the lake.

(2) Residential Development:

A. Extent: This is a discontinuous MU which encompasses the parts of the following subdivisions which lie within 500' of the shoreline: Sutton Lake by the Sea, Lakeshore by the Sea and Lakewood Tract.

B. Rationale:

1. Platted subdivisions;

2. Existing residential use.

C. Discussion: Although sparsely developed, these subdivisions have been platted for 15 to 20 years. Roads and utilities are in place and residential use is well established.

(3) Natural Resources Preservation:

A. Extent: From the west line of tax lot 17-12-26.4.3-201 west and south around the lake to the west line of section 17-12-25. Extends 500' from the shoreline excluding that portion of Sutton Lake by the Sea within MU 2.

B. Rationale:

1. Extensive marshes;

2. Riparian vegetation on east shore.

C. Discussion: Sutton Lake has fairly extensive marshes compared to other lakes in the study area and, therefore, has a high fish population and is used by both waterbirds and furbearers.

(4) Significant Natural Area:

A. Extent: Tax lots 17-12-26-2000 and 17-12-35.1-100 extending from the shoreline to Mercer Lake North Road.

B. Rationale:

1. Primary productivity;

2. Wildlife use;

3. Low marshy ground.

C. Discussion: The size of this willow, sedge and bulrush marsh makes it a very valuable resource to preserve. It is used for feeding and wintering grounds for waterfowl, spawning and rearing grounds for aquatic life and is commonly used by fur-bearing mammals. (W&H, p. II-22) The decaying marsh vegetation introduces nutrients and organics into the aquatic system which, along with phytoplankton and microfauna, set the stage for pyramidal food production.

Mercer Lake:

(1) Residential Development:

A. Extent: This MU exists in two sections, one extending 500 feet from the lakeshore from the south line of tax lot 17-12-36-1200 south to Mercer Lake Road. Then from the shoreline to the road east along the south side of the lake to the southern tip of 17-12-36-3-3000. The second section starts on the south side of Mercer Lake Road at the west line of 17-12-36-4-5900, east along the road to include 17-12-36-4-11. Also on the lake side of Mercer Lake Road, from the south line of 17-12-36-4-3800 around Dowells Peninsula to the east line of 17-12-36-4-800.

B. Rationale:

1. Platted Subdivisions;

2. Existing residential use.

C. Discussion: The existing residential and commercial character of this portion of the lake led to this designation. Natural revegetation is encouraged in those cases where indiginous species have been replaced with grass to the water edge. This is particularly important to help

control runoff of chemicals, such as fertilizers or herbicides, into the lake.

(2) Prime Wildlife Area:

A. Extent: From the east line of tax lot 17-12-36-4-700 around the south shore of the lake to Bailey Creek and extending from the shoreline to Mercer Lake Road.

B. Rationale:

1. Marshlands;

2. Waterfowl use;

3. Stabilizing influence;

4. Recreational use.

C. Discussion: Although this is a narrow strip of vegetation, it is important both for wildlife use and to stabilize the bank from effects of the road cut. Protection of this area should be in conjunction with actions in MU 3, i.e., removal of timber from above the road should be accomplished in a manner that will not result in blowdown of this vegetation. Residential use exists near Bailey Creek and a public boat ramp is also present here.

(3) Natural Resource Preservation:

A. Extent: From the south side of Mercer Lake Road on the west to Bailey Creek and extending from Mercer Lake Road to a point 500 feet from the south shoreline of the lake, except on the far western portion where it would be confined between Mercer Lake Road on the north and Collard Road on the south. Also includes that land on the lake side of the road from the south tip of 17-12-36-3-3000 on the west, extending east to the north line of 17-12-36-4-3900.

B. Rationale:

1. Timber resource;

2. Steep slopes;

3. Waterfowl use for resting and perching;

4. Wildlife value.

C. Discussion: Timber harvesting from these steep slopes must be carefully managed to prevent damage to the County road and to the row of trees on MU #2 between the road and the lake. If necessary to achieve these objectives, a buffer strip of trees shall be left above the road.

American Osprey nests are known to be present in this MU. In conjunction with the State Forest Practices Officer, these nests will be

preserved along with a vegetative buffer strip around them. The area is important for other forms of wildlife which either live here or use this area as an avenue to the lake. Housing would not be a compatible use in that portion of the unit which lies between the lake and the road.

(4) Prime Wildlife Area:

A. Extent: From the south line of tax lot 17-12-36-1200 around the north shore of the lake to Bailey Creek, and extending 150 feet from the shoreline.

B. Rationale:

1. Wildlife habitat;

2. Erosion control;

3. Bank stabilization;

4. Osprey nests;

5. Residential use.

C. Discussion: This north shore has no road which makes a natural division between this MU and #5 upland from it. A 150-foot strip of essentially natural vegetation will retain this riparian habitat as well as assist in erosion control and bank stabilization. A preferable system would set a minimum setback distance for flat ground with an increasing setback for each degree of slope. Lack of this system at the present time should not be a justification for actions which may undermine the purpose of this district.

Regardless of the existing residences, this area has high wildlife value.

(5) Natural Resources Preservation:

A. Extent: From the south line of tax lot 17-12-36-1200 around the north shore of the lake to Bailey Creek, and extending from MU 4 to a point 500 feet from the lake.

B. Rationale:

1. Timber resource;

2. Steep slopes;

3. Isolated--poor access;

4. Wildlife use.

C. Discussion: The western half of this MU is isolated with very little development. More development is present off Dahlin Road on the eastern portion of this MU. Any timber harvesting must be outside the Prime

Wildlife designation, at least 150' from the lake. Additional setbacks may be necessary in some draws to prevent landsliding.

Many species of wildlife either live in this MU or use the area as an avenue to the lake.

Collard Lake:

(1) Significant Natural Area:

See CLEAR LAKE MU 1 for extent and discussion.

(2) Natural Resources Preservation:

A. Extent: From Collard Lake Road south to the south line of tax lot 18-12-1-600 and extending 500' from the lake.

B. Rationale:

1. Watershed for Clear Lake;

2. Steep slopes.

C. Discussion: Maintaining excellent water quality in Collard Lake is as important as for Clear Lake as it drains directly into the municipal water supply. Therefore, an erosion control plan shall be required for any construction or road building. A low density for residences in the 500' along the lake in this MU will assist in maintaining water quality by limiting runoff into the lake.

(3) Residential Development:

A. Extent: The portions of the platted subdivisions Collard Lake Heights and Collard Lake Acres, which are within 500' of the lake, and that portion of tax lot 18-12-1-200 which is within 500' of the lake.

B. Rationale:

1. Platted subdivisions;

2. Existing residential development.

C. Discussion: An erosion control plan is required for all additional development in these subdivisions.

Clear Lake:

(1) Significant Natural Area:

A. Extent: 500' from the lake along the entire shore of Clear Lake. Also extends north along the east shore of Collard Lake to the north boundary

of tax lot 18-12-1-800 and up the west shore of Collard Lake to the east boundary of tax lot 18-12-1-200, all 500' from Collard Lake.

B. Rationale:

1. Municipal water supply;

2. Open dune sands on west shores;

3. Wildlife habitat on east shores;

4. Large parcel size;

5. Isolated - no road access.

C. Discussion: The overriding concern in this MU is the municipal water supply for the Heceta Water District, with currently over 900 connections. Clear Lake is deep with a sand bottom and could be severely effected by human-caused pollutants, including sedimentation. Collard Lake is shallower, has much less volume and is also very susceptible to human-caused eutrophication. The open sand dunes on the west shores of Clear and Collard Lakes are fragile and should be undisturbed except for minimum stabilization plantings necessary to prevent further migration of open sand dunes into the lakes. Additionally, they are visually impressive from the subdivisions on Collard Lake and contribute to the scenic value of the lakes. The east shore of Clear Lake supports a healthy riparian belt with a large wildlife community. (W&H p. II-24)

The County supports limiting the use of both Clear and Collard Lakes to only nonmotorized boats.

Ackerly Lake:

(1) Natural Resources Preservation:

A. Extent: 500' from the shoreline, except to the north where the Clear Lake MU takes precedence.

B. Rationale:

1. Steep slopes;

2. Isolated - poor access;

3. Riparian vegetation.

C. Discussion: This is a small lake with essentially no physical data available. The outflow drains into the north end of Munsel Lake; therefore, it is important to maintain the quality by limiting erosion or runoff into Ackerly Lake.

Munsel Lake:

(1) Residential Development:

A. Extent: From the north line of tax lot 18-12-14-2200 north to the west line of 18-12-14.1-100 and extending 500' from the shoreline.

B. Rationale:

1. Existing residential character;

2. Within urban growth boundary of Florence.

C. Discussion: Although residentially developed, these small lots have never been platted as a subdivision. The area has slight value for wildlife at this time due to the destruction of riparian vegetation as a result of residential development. The regrowth of natural vegetation is encouraged and would not detract from the residential use.

(2) Natural Resources Preservation:

A. Extent: North from the west line of tax lot 18-12-14.1-100 to the north line of section 18-12-13 and extending 500' from the shoreline.

B. Rationale:

1. Open dune advancement;

2. Isolated - poor access;

3. Generally large lot size;

4. Adjacent to marshy area of lake.

C. Discussion: Munsel Lake is quite deep, with a small marshy area near its northeast shores. A portion of the marsh has been artificially filled with sand, destroying the natural habitat. Because maintenance of a marsh fringe is essential to continued productivity of the lake, no additional filling shall be allowed.

(3) Prime Wildlife Area:

A. Extent: From the north line of section 18-12-13 around the east side of the lake to the south line of tax lot 18-12-13-300.

B. Rationale:

1. Wildlife use;

2. Steep slopes;

3. Riparian vegetation;

4. Isolated - no road access.

C. Discussion: The isolated nature of this riparian belt provides excellent habitat for several species of mammals and birds, besides being beneficial to the water quality of the lake.

(4) Natural Resources Preservation:

A. Extent: From the south line of tax lot 18-12-13-300 around the south shore of the lake to the north line of tax lot 18-12-14-2200.

B. Rationale:

1. Steep slopes;

2. Riparian vegetation;

3. Timber resource;

4. Wildlife value.

C. Discussion: Although the existing Coastal Subarea Plan shows this area within an "URBAN RESIDENTIAL" land use category, development at the intensity normally allowed within this designation would be inappropriate in this MU. Hence, great care should be taken to ensure that no development results in, or contributes to, the degradation of water quality in Munsel Lake. At the minimum, an erosion control plan shall be required on any development within this MU.

Based upon the findings of this report and the new coastal inventories, consideration should be given to modification of the subarea plan's "URBAN RESIDENTIAL" category boundaries where they include this MU.

It should also be recognized that this area has high wildlife value, essentially the same as that on the east shore of the lake, which should be considered with any request.

Cleawox Lake:

(1) Natural Resources Preservation:

A. Extent: 500' from the shoreline surrounding the lake.

B. Rationale:

1. Honeyman State Park;

2. DNRA;

3. Open dune on west shore;

4. Wildlife use.

C. Discussion: The majority of this MU falls within the DNRA, with much of the remainder within Honeyman State Park. Only a small portion, on the north end, is privately owned. This lake receives very heavy recreational use, as do the dunes around it.

The east shoreline, although developed on the north arm with some residences, is heavily vegetated and receives heavy wildlife use.

Woahink Lake:

(1) National Resources Preservation:

A. Extent: From the south line of tax lot 19-12-15-100 north around the lake to a point 1,000' south of the north line of tax lot 19-12-11-600, and extending 500' from the shoreline.

B. Rationale:

1. Honeyman State Park.

C. Discussion: The entire MU is owned by the State of Oregon, but only a portion is developed as part of Honeyman State Park. The state should be encouraged to allow natural riparian plants to revegetate the shore of the large peninsula which projects into the lake, both to preclude runoff of fertilizers, etc, and to enhance the visual aesthetics of the lake.

(2) Prime Wildlife Area:

A. Extent: North from a point 1,000' south of the north line of 19-12-11-600 and extending 500' from the shoreline.

B. Rationale:

1. Marshes;

2. Riparian vegetation.

C. Discussion: These two arms of the lake support healthy marshes with sedges and water lilies. Since Woahink is a deep lake with few marshy areas, each of these gains greater value for preservation.

Siltcoos Lake:

(1) Significant Natural Area:

A. Extent: Butterfly, Reed and Jernigan islands in Siltcoos Lake.

B. Rationale:

1. Heavy wildlife use;

2. Riparian vegetation;

3. Marshes - seasonal and permanent.

C. Discussion: The rich stands of riparian vegetation, as well as the isolation, contribute to the wildlife use of these islands. The three islands are seasonally submerged, with particularly heavy bird use. Bald eagles and American Osprey are among the visitors.

(2) Prime Wildlife Area:

A. Extent: That land in sections 1 and 2 of 20-12 and sections 25 and 36 of 19-12 which is west of the railroad tracks.

B. Rationale:

1. Marshy area;

2. Isolated.

C. Discussion: These marsh fringes are included in this MU to emphasize the importance of the marsh complexes in the health of the aquatic ecosystem. They provide a vital link in the continued productivity of a lake.

(3) Natural Resources Preservation:

A. Extent: From the county line north to the railroad tracks in section 19-11-30 and from the tracks on the west to a point 1,000' from the lake, except extending west of the track to include tax lot 700.

B. Rationale:

1. Steep slopes;

2. Isolated;

3. Timber resource;

4. County park.

C. Discussion: Scattered residential use, Ada Park and a commercial fishing camp are located in this MU. Further development is limited by the slopes. The railroad tracks form the west border of this MU and they generally serve as a buffer for upland uses.

(4) Prime Wildlife Area:

A. Extent: From the railroad tracks in section 19-11-30 north and west around the lake to the east line of section 19-12-25 and extending 500' from the line of nonaquatic vegetation.

B. Rationale:

1. Unique marshland assemblage on Miller Arm;

2. Wildlife use.

C. Discussion: The Miller Arm marsh, the largest single marsh expanse on Siltcoos Lake, is an uncommon assemblage of canary-grass and tule. The upper reaches have been diked in the past and are now pastureland. The higher reaches of canary grass have been harvested in the past but are now undisturbed and harbor abundant wildlife.

(5) Prime Wildlife Areas:

A. Extent: From the east line of section 19-12-25 west and north around the lake to the city limits of Dunes City and extending 150' inland. Also the portions of the peninsula in section 26 and 35 of 19-12 which are within 150' of shoreline.

B. Rationale:

1. Riparian vegetation;

2. Gradation into Douglas Fir-trailing blackberry community;

3. Osprey nests;

4. Adjacent to valuable marshlands.

C. Discussion: Siltcoos receives particularly heavy waterfowl use due to the abundance of fish in this shallow lake. In addition, the preservation of this wildlife habitat, the 150' buffer strip serves a variety of purposes. The strip aids in erosion control from upland timber operations, increases bank stability, and provides a positive aesthetic benefit to the area.

(6) Natural Resources Preservation:

A. Extent: Upland from MU #5. From the east line of section 19-12-25 west and north around the lake to the Dunes City limits. Extends from MU #5 to a point 500' from the shoreline. Also the remainder of the peninsula in sections 26 and 35 of 19-12 not covered by MU #5.

B. Rationale:

1. Developed Boy Scout camp;

2. Timber resource on eastern segment of MU;

3. Adjacent to Prime Wildlife Area MU.

4. Wildlife value for birds and furbearers.

C. Discussion: The peninsula is the site of Camp Baker, a Boy Scout camp. The scouts have an ongoing process of improving and adding on to their campsites, but the natural character of the peninsula is essentially maintained.

Any timber removal in this area should be done with cognizance of the presence of American Osprey nests in the adjacent MU (#5). A buffer strip may be required.

This MU is very important for wildlife, as many creatures either live here or use this area as an avenue from the uplands to the lake.

(7) Natural Resources Preservation:

A. Extent: The area within sections 23, 24, 25 and 26 of 19-12 north of the south city limits line which are outside the city limits of Dunes City but within 500' of the lake.

B. Rationale:

1. Marsh fringe;

2. Unusual parcel configuration;

3. Outside city limits.

C. Discussion: Any high density residential use should be within the city limits of Dunes City.

(8) Prime Wildlife Area:

A. Extent: The west shore of Siltcoos Lake from the south county line north to the city limits of Dunes City and 500' inland.

B. Rationale:

1. Inland sector of DNRA;

2. Riparian vegetation grading to Douglas Fir forests;

3. Osprey nests;

4. Marsh fringe;

5. Isolated.

C. Discussion: Although currently in private ownership, this land is within the boundaries of the DNRA. This isolated area is excellent habitat for several species of wildlife. Long-range plans by the DNRA include a primitive hiker camp on this portion of the lake.

(9) Natural Resources Preservation:

A. Extent: Parallel with and adjacent to MU #8 west of Siltcoos Lake, extending from the south County line, north to the city limits of Dunes City and 500 feet inland from the lakeshore.

B. Rationale:

1. Inland sector of DNRA;

2. Steep slopes;

3. Recurrent landslide potential;

4. Isolated.

C. Discussion: See Siltcoos MU #8 discussion above.

(10) Natural Resources Preservation:

A. Extent: Northernmost Island (Grass Island), in Siltcoos Lake.

B. Rationale:

1. Flood hazard;

2. Landslide hazard;

3. Riparian vegetation;

4. Designated significant natural area (Oregon Natural Heritage Program).

C. Discussion: Relative isolation, unique site and riparian vegetation are critical reasons for preservation.

Shorelands West of Highway 101:

(1) Significant Natural Area:

A. Extent: From the County line on the north, south to the north line of 15-12-27.1-2801, lands west of Highway 101 except that located in MU #2.

B. Rationale:

1. Headlands;

2. Bays adjacent to Headlands;

3. Aesthetic resource;

4. Wildlife--particularly shorebird-use;

5. Tidepools;

6. Existing parks;

7. Recreational usage.

C. Discussion: The majority of this area is presently in public ownership, allowing the exceptional scenic benefits to be enjoyed by all. Limits

have been placed on removal of organisms from the tidepools, in a portion of this MU, to retain them in a natural state. Any additional recreational development should not conflict with the aesthetic values of the area.

(2) Natural Resources Preservation:

A. Extent: That part of tax lot 15-12-22.1-100 which lies west of Highway 101 and extending west to a point 50' inland from the break in the slope. The remainder of the tax lot--that portion within 50' of the break in the slope and the headland itself--are within the MU #1.

B. Rationale:

1. Timber resource;

2. Set back from headland.

C. Discussion: This heavily wooded site is set back from the headland itself. Low-intensity uses will assist in wildlife maintenance as well as general aesthetics of the area. Any timber removal should be followed by prompt reforestation to help achieve the same objectives.

(3) Residential Development

A. Extent: The lands lying west of Highway 101 from the north line of 15-12-27.1-2801 south to the north boundary of 15-12-27.4 TAX LOT 200.

B. Rationale:

1. Existing residential use;

2. Limited commercial use;

C. Discussion: The developed area of Searose Beach includes both residences and commercial uses. The primary consideration for additional development is potential ocean undercutting hazard. The minimum setback from the cutbank is 50 feet (Coastal Subarea Plan).

(4) Prime Wildlife Area:

A. Extent: Land lying west of Highway 101 from Tax Lot 15-12-27.4-2100 on the south, north to the middle of 15-12-27.4, Tax Lot 200.

B. Rationale:

1. Endangered silverspot butterfly habitat.

C. Discussion: The grassy fields in this state park support a population of the endangered silverspot butterfly (W&H Maps). This habitat has already suffered from development impacts and future residential development should maintain the lowest density possible and be designed in such a manner as to incur the least feasible impact.

(5) Residential Development:

A. Extent: Lands lying west of Highway 101 from the south line of tax lot 15-12-27.4-2100 on the north to the south line of 15-12-34-2300.

B. Rationale:

1. Existing residential use;

2. Fully platted.

C. Discussion: Residential use is the prominent characteristic of this MU, with limited commercial and recreational use. A minimum setback of 50' (horizontal) from the cutbank is required for any future development. The potential of ocean undercutting should be evaluated in each case and may result in a setback greater than 50'.

(6) Significant Natural Area:

A. Extent: From the south line of 15-12-34-2300 in the north to the north line of tax lot 16-12-3-600 in the south, and including all lands west of Highway 101.

B. Rationale:

1. Headland;

2. Shorebird use;

3. Aesthetic value.

C. Discussion: This small undeveloped headland is a valuable aesthetic resource, as are the other locations on Lane County's coast where a direct view of the ocean is possible from the highway.

(7) Natural Resources Preservation:

A. Extent: From the north line of tax lot 16-12-3-600 south to the south line of tax lot 16-12-10-800, lands lying west of Highway 101.

B. Rationale:

1. Existing residential use;

2. Ocean undercutting potential.

C. Discussion: Residences, and one commercial establishment are located in this MU. Area for expansion is limited. A minimum setback of 50' from the cutbank is required.

(8) Significant Natural Area:

A. Extent: From the south line of tax lot 16-12-10-800 south to Rock Creek, lands west of Highway 101.

B. Rationale:

1. Headland;

2. Shorebird use;

3. Aesthetic resource;

4. Recreational use.

C. Discussion: This MU encompasses a minor headland called Rocky Knoll, as well as the area to the north which includes Ocean Beach Forest Camp. All of this MU is in public ownership and should remain as such to preserve the natural values.

(9) Prime Wildlife Area:

A. Extent: Lands west of Highway 101 and those lands lying within 500 yards of the eastern boundary of the highway between Rock Creek on the north and Big Creek on the south.

B. Rationale:

1. Endangered silverspot habitat;

2. Visual resource.

C. Discussion: These grassy fields support one of the few remaining habitats for the silverspot butterfly (Speyeria zerene hippolyta) (W&H). Since little is known about the specific habitat needs of this insect, the area should remain in an undisturbed state and every effort must be made to ensure their livelihood.

Inclusion of this insect on the National List of Rare and Endangered Species is described by the US Department of the Interior as "imminent." The extreme southern end of this MU designates some privately owned lands. Those parts of TLs 300 and 303 on Map 16-12-15 in the MU should be "flagged" or specially identified so that, if proposed for development which would endanger this habitat, appropriate public agencies will have 90 days to acquire the land.

(10) Natural Resources Preservation:

A. Extent: Lands lying west of Highway 101 from Big Creek in the north to the south line of section 16-12-27 in the south.

B. Rationale:

1. Existing state parks;

2. Potential wave overtopping and ocean undercutting;

3. Valuable aesthetic resource.

C. Discussion: Muriel Ponsler Memorial Wayside and a portion of Washburn State Park are located in this MU. A parcel in private ownership exists north of the Wayside and south of Big Creek. This is a site of exceptional aesthetic value and, as such, would be a valuable addition to the publicly owned lands of the Lane County coastline. Any development of the site while in private ownership must respect not only the potential natural hazards but be in harmony with the aesthetic setting, as determined by a site review through the County.

(11) Significant Natural Area:

A. Extent: Lands lying west of Highway 101 from the south line of section 16-12-27 to the south line of section 17-12-10.

B. Rationale:

1. Major headlands;

2. Sea Lion Caves;

3. Shorebird use;

4. Tidepools;

5. Important aesthetic resource.

C. Discussion: These headlands include Heceta Head and Sea Lion Point, major features on the Lane County coastline. Devil's Elbow State Park and the privately operated Sea Lion Caves are located here and are host to abundant wildlife as well as being popular recreation sites. Some of the most striking scenic views in the County can be found here with the cliffs above the Sea Lion Caves and the view south overlooking the Coos Bay dune sheet. These diverse values require great care to be exercised in any change or intensification of use.

CHAPTER V

GOAL 18 - BEACHES AND DUNES

INTRODUCTION

The Beaches and Dunes Goal requires specific action on the part of each local government. Basically, the goal requires that each type of dune landform be used to a degree no greater than it is capable of sustaining, and that the threat to human life and property be reduced. Additionally, a diverse array of uses shall be encouraged. Decisions shall be based, in part, on an inventory. Then, "based on the inventory, comprehensive plans for coastal areas shall:

(1) identify beach and dune areas; and

(2) establish policies and uses for these areas consistent with the provision of this goal."

METHODOLOGY

The Beaches and Dunes Goal is approached in a different manner than were the Estuary and Coastal Shorelands Goals. Rather than assigning management units and prescribing uses within them, this goal sets out the manner in which developments should occur on the various dune forms in coastal Lane County.

The following discussion is, for the most part, from the inventory work done for Lane County, in line with the goals requirements, and dated 1978. This discussion is brief; reference should be made to the publication, "Lane County, Coastal Resource Inventory," for further information.

Additional information is occasionally incorporated from the Beaches and Dunes study in 1978-79 by the Oregon Coastal Zone Management Association.

The Beaches and Dunes Goal requires the operational recognition of, and distinction between, six different types of sand landforms. These are (1) beaches, (2) foredunes, (3) active dune forms, (4) recently stabilized dune forms, (5) older stabilized dune forms and (6) interdune forms.

BEACHES

Definition: Gently sloping zone of unconsolidated material (e.g., sand, gravel and cobbles) that extend landward from the low-water line to the uppermost line of effective wave or tidal action.

Characteristics:

1. Characteristics, size, shape and slope are subject to change due to influences such as storms, sand supply, littoral drift (or the interruption of it), landward occurrences, and other natural or man-induced occurrences;

2. Subject to seasonal profile changes, instability, ocean flooding, tsunamis and erosion;

3. Critical habitat for some species;

4. Often highly aesthetic;

5. The beach budget (loss or gain) in Lane County is essentially zero at the present time. Because beaches are in the coastline's primary line of defense against storm wave impact, any sand removal results in an increased threat to shoreline development.

6. Upper beach driftlog accumulation plays a major role in the development of foredunes and absorb some storm wave impact.

7. Highly tolerant of most transient activities.

Policies:

1. Development on the beach is not allowed, with the exception of certain features such as necessary jetties or beachfront protective structures.

2. Permits for beachfront protective structures shall be issued only for those developments that existed on January 1, 1977. Criteria for the issuance of such permits shall include, at least, that:

   (a) visual impacts are minimized,

   (b) necessary public access to the beach is maintained,

   (c) negative impacts on adjacent property are minimized as much as possible,

   (d) long-term or recurring costs to the public are avoided and

   (e) riprap materials must meet Army Corps Of Engineers strength and design standards.

3. No sand mining shall be allowed on the beach.

4. Certain access points to beaches shall be closed to off-road vehicle traffic seasonally or temporarily upon findings by the appropriate agency that such closure is necessary.

5. Driftlog removal should be limited.

6. Access to the two documented sites of snowy plover nesting habitat at the mouths of Sutton Creek and Siltcoos River should be prohibited during the nesting season (April-June).

FOREDUNE

Definition: The first ridge of sand or hummock dunes situated immediately above the highest tide line and parallel to the beach.

Characteristics:

1. May be active (sparsely vegetated) or conditionally stabilized (sufficient vegetation cover to eliminate wind erosion).

2. All foredunes are subject to wave overtopping and ocean undercutting.

3. Conditionally stable foredunes are wind-stable. They may also reduce storm wind and, to a limited degree, debris impact to immediately adjacent inland sites.

4. Conditionally stable foredunes do not provide a serious defense against storm waves. They are highly erodable by storm waves.

5. All foredunes are impermanent landforms. Their existence and location are determined and may be changed by offshore and nearshore current and topographic changes, ocean storms and vegetative destruction.

6. European beachgrass, the primary foredune vegetation stabilizer in Lane County, is easily damaged and destroyed by pedestrian and off-road vehicle traffic. Resultant blowouts can threaten inland sites with sand inundation and serious ocean flooding.

7. Snowy plover nesting sites may occur on the lower vegetation-free windward slopes of some foredunes.

Policies:

1. Because the foredune is a highly impermanent landform and subject to a number of extreme hazards, no permanent development will be allowed here. Allowable development may include temporary raised boardwalks which provide beach access and avoid vegetation trampling.

2. Access to the two documented sites of snowy plover nesting habitat at the mouths of Sutton Creek and Siltcoos River should be prohibited during the nesting season (April-June).

3. Breaching of foredunes shall be allowed only to replenish sand supply in interdune areas or on a temporary basis in an emergency and only if the breaching and restoration after breaching is consistent with sound principles of conservation.

4. When allowed through the LCDC exception process, any residential infilling shall be required to maintain at least a 50-foot horizontal setback from the mean high tide line. A County site review shall be required.

5. Due to the extreme porosity of the sand (and in interdune areas, a high groundwater table), leaks in buried fuel oil or gasoline tanks could present a serious threat to the quality of the groundwater in the dunal aquifer. No new buried fuel tanks shall be permitted without a County inspection to determine proper placement and design standards so that water resources are protected.

ACTIVE DUNE FORMS

Definition: A dune that migrates, grows and diminishes primarily according to the force of wind and supply of sand. Active dunes include all open sand (vegetation-free) areas and active (sparsely vegetated) hummocks and foredunes.

Characteristics:

1. A landform that is subject to topographic modification primarily due to the action of wind on sand and which is completely or significantly vegetation free. Some natural or man-induced changes, such as fire, excavation or trail cutting can result in highly mobile sand dunes and create such hazards as inundation of structures, settling and cracking of foundations and changes in the water table. Conversely, active dunes can become conditionally stabilized due to either natural or human action;

2. Active foredunes presently occur in Lane County at Heceta Beach, where young stabilized dunes are being eroded, and north of Heceta Beach, where the foredune is in an early state of development;

3. Other active dune forms have severe development constraints, such as the mobile nature of the formation, blowing sand, unconsolidated foundations, foundation undermining, and sand accumulation on the upwind side;

4. The lee (downwind) slope of an active dune is commonly characterized by being at or near the maximimum stable angle of repose, although oversteepening and consequent slumping is not unknown, particularly in the larger dune forms.

Policies:

1. Because of the highly unstable nature of these landforms, development will be prohibited where they occur.

2. Recreational vehicular traffic should be prohibited on any County active sand dune areas north of the Siuslaw River.

RECENTLY STABILIZED DUNE FORMS

Definition: A dune which presently has sufficient vegetation to be stabilized from wind erosion but which exhibits little, if any, soil development or cohesion of underlying sand. Includes soilless dunes recently stabilized with beach grass (conditionally stable foredune, hummocks and sections of open sand landscapes) and younger stabilized dunes which may possess forest communities and some soil development but lack consolidation of underlying sands.

NOTE: "Conditionally" stabilized means that stability from wind erosion is dependent upon maintaining the vegetative cover.

Characteristics:

1. Dunes conditionally stabilized with beachgrass constitute an extreme fire hazard because of the dry flammable nature of this grass at maturity.

2. Characterized by a "thin" vegetative cover that is susceptible to damage from pedestrian and ORV traffic.

3. "Blowouts" or dune reactivation can easily occur where vegetation is destroyed or excavation sites are not properly stabilized.

4. Major disturbances of ground cover can lead to large-scale property damage from large marauding sand dunes.

5. The lee slopes of recently stabilized dunes are commonly at or near their maximum angle of repose. These slopes are extremely susceptible to slumping and failure if disturbed.

6. Exaggerated shaking can result during earthquakes.

Policies:

1. Development shall result in the least topographic modification of the site as is reasonable and possible.

2. Development shall not result in the clearance of natural vegetation in excess of that which is necessary for the actual structures, required access, fire safety requirements and the required septic or sewage disposal system. Parcels which exhibit vegetation-free areas suitable for development should utilize such areas for the building site where feasible. Areas which exhibit excessive vegetation removal shall be replanted as soon as possible.

3. Sand stabilization is required of the developer or owner: (1) using temporary stabilization techniques during all construction phases, and (2) through an ongoing maintenance program, including preliminary revegetation with beachgrass (or other species recommended by a recognized expert), fertilization and later plantings of appropriate secondary successional species at the appropriate time. Successional species reduce the extreme fire hazard associated with mature beachgrass.

4. In order to protect the quality of the groundwater and the dunal aquifer, unsewered residential development will require a site review to determine appropriate residential density. Such development will be conditional upon approval by Lane County Water Pollution Control, Environmental Health and Planning Divisions. Specially designed septics may be required in these instances.

5. In assessing new development, the cumulative effect of the combination of existing development, along with that proposed, has to be considered in assessing the feasibility of the new development.

6. All development proposals for recently stabilized sand dune areas, except proposals for minimum development, must be accompanied by a Lane County Sand Dune Hazards Checklist. Results of the completed Checklist will determine any need for a further Site Investigation Report.

7. Due to the extreme porosity of the sand (and in interdune areas, a high groundwater table), leaks in buried fuel oil or gasoline tanks could present

a serious threat to the quality of the groundwater in the dunal aquifer. No new buried fuel tanks shall be permitted without a County inspection to determine proper placement and design standards so that water resources are protected.

OLDER STABILIZED DUNE FORMS

Definition: A wind stable dune which exhibits a poor to moderately well developed soil, semi-cemented underlying sand and often a diverse forest cover.

Characteristics:

1. Has extensive vegetation cover, a moderate soil cover and semi-consolidated underlying sands (compression strength commonly greater than 1-1/2 tons/square foot).

2. This formation is commonly underlain by buried soils, peat deposits, iron bands and clay lenses which can prove a serious detriment to downslope percolation of groundwater and result in a perched water table and surface ponding.

3. Although it will commonly hold a cliff when cut, this dune is subject to slumping, particularly when wet.

4. The older stabilized dune may be overlain by and interspersed with layers of loose sand. It is commonly underlain by such unconsolidated sands as well. When exposed, this sand will be reactivated and could migrate into developed areas.

5. A preliminary investigation by the Lane County Planning Division staff (Sand Dune Hazards Checklist) shall be conducted to determine if significant hazards are imposed by the development. If appropriate a Site Investigation Report may be required.

6. Unpredictable earthquake response and occasionally higher groundwater may occur within this unit.

7. This is a relatively common dune form in Lane County.

8. Older, stabilized dunes suffer more severe impacts from vegetation disturbance (due to damage to the extensive network of root systems) than the younger stabilized dunes. Furthermore, they are significantly more difficult and expensive to revegetate. The preexisting vegetation community cannot be replanted but must return successionally.

9. Although vegetated, the lee (downwind) slopes of stabiized dunes can be considered to be in critical equilibrium in many cases. Slope slumping may occur if developed.

10. Older stabilized dunes have previously advanced over swamps, tidal flats and peat bog deposits, all of which are extremely compressible even if they are several feet below the surface. Development may result in uneven settlement.

11. In many cases, this dune is in the path of advancing dunes.

Policies:

1. Although relatively stabilized, great care must be exercised with any human activity in the older stabilized dune areas. The variability and inconsistency of substrate characteristics can lead to a wide variety of hazards if developed, including slumping, reactivation, septic tank failure, subsequent danger of groundwater pollution and uneven settling.

2. Slope is an important factor in respect to septic drainfields, roads, excavations and expecially landslides. This factor should be specifically addressed by both the developer and the reviewing body.

3. Significant structural loads or structural fills to be placed on dune areas where compressible subsurface areas are suspected should be allowed only after a thorough foundation check and positive findings are reported.

4. Development shall result in the least topographic modification of the site as is reasonable and possible and shall avoid the steeper slopes.

5. Development shall not result in the clearance of natural vegetation in excess of that which is necessary for the actual structure/s, required access, fire safety requirements and the required septic or sewage disposal system. Parcels which exhibit vegetation-free areas suitable for development should utilize such areas for the building site where feasible. Areas which experience excessive vegetation removal shall be replanted as soon as possible.

6. In order to protect the quality of the groundwater and the dunal aquifer, unsewered residential development will require a site review to determine appropriate residential density. Such development will be conditional upon approval by Lane County Water Pollution Control, Environmental Health and Planning Divisions. Specially designed septics may be required in these instances.

7. Due to the extreme porosity of the sand (and in interdune areas, a high groundwater table), leaks in buried fuel oil or gasoline tanks could present a serious threat to the quality of the groundwater in the dunal aquifer. No new buried fuel tanks shall be permitted without a County inspection to determine proper placement and design standards so that water resources are protected.

INTERDUNE FORMS:

Definition: Includes (1) the broad near shore deflation and upland interdunal plain areas which commonly exhibit a high water table and (2) other occasionally wet interdune swales.

(Other dune forms such as hummocks, occasionally occur within a deflation plain unit.)

Characteristics:

1. Interdune areas may take one of three forms:

   a. The nearshore deflation plain:

      i. Low, flat strip just inland from and adjacent to the foredune, and at an elevation just over mean sea level;

      ii. Created by windscouring of sand particles down to the level of the summer water table. The return of the higher winter water table will create standing water in this zone for a few weeks or possibly several months of the year;

      iii. Depending on the length of time the area is submerged in the winter the vegetation community may consist of grasses, marsh communities or shrubs;

      iv. May experience ocean flooding;

      v. Well stabilized with vegetation north of the Siuslaw River except where disturbed by excavation, heavy ORV traffic, localized deflation basins and recent dunal activity.

   b. Upland interdunal plain:

      i. Broad, flat areas which may occur a mile or more inland from the shore and may exist at elevations of up to 80 feet or greater. The groundwater table is typically high.

      ii. Formed in the wake of successive easterly advancing dune ridges where the deflation surface (the uypper surface of the groundwater) is relatively high and probably increases in height with the passage of each successive dune ridge.

      iii. Commonly exhibits a forest community which may belie the locally high water table.

   c. Occasionally wet interdune:

      i. Occur in swale areas between dune crests or ridges;

      ii. Are considerably less extensive than most deflation or upland interdune plain areas.

      iii. May contain standing water in intermittent years or intermittently throughout the year.

      iv. Commonly exhibit marshy or low shrubby vegetation.

2. Surface and groundwater movement in these areas is relatively unobstructed and such movement is necessary for the normal functioning of these areas.

3. Liquification and severely exaggerated shaking can create hazardous conditions during earthquakes.

Policies:

1. Due to the severe limitations of the near shore deflation plain, and in order to protect the quality of the groundwater and the dunal aquifer, development, except for limited minor development, shall be prohibited.

2. Due to the extreme porosity of the sand (and in interdune areas, a high groundwater table) leaks in buried fuel oil or gasoline tanks could present a serious threat to the quality of the groundwater in the dunal aquifer. No new buried fuel tanks shall be permitted without a County inspection to determine proper placement and design standards so that water resources are protected.

3. To assure protection of groundwater and the dunal aquifer, nonsewered residential and other development proposed for interdune areas, other than the near shore deflation plain:

   a. Density shall be determined by County site review;

   b. May require a specially designed waste treatment and disposal device.

   c. Shall require a staff investigation (Sand Dune Hazards Check-List) and, if deemed necessary by the Lane County Planning Department, a Site Investigation Report;

   d. Shall not result in the clearance of existing vegetation in excess of that which is necessary for the dwelling unit, required access, fire safety requirements and the required septic or sewage disposal system. If possible, septic drain lines should be placed among existing vegetation to avoid unnecessary vegetation removal. Parcels which exhibit vegetation-free areas should utilize such areas for the building site where feasible. Sites which experience excessive vegetation removal shall be replanted as soon as possible.

CHAPTER VI

GOAL 19 - OCEAN RESOURCES

INTRODUCTION

There is little question that the quality of ocean resources--primarily the potential for food production--is a vital interest of not only Lane County, but of the State of Oregon and the nation. Goal 19 mandates that the three levels of government be cognizant of, and maintain programs to, insure that this quality is not diminished or threatened by actions occurring either along the shoreline or in the water itself (particularly areas along the continental shelf).

NECESSARY ACTION

As cited earlier in this report, the Goal requires, in essence, that local governments (including Lane County) monitor activities which are likely to have an impact on ocean resources. Such activities might include offshore drilling for oil, construction of new ports or improvements of existing ones (jetty expansion, for example), power plant construction in coastal areas (including nuclear power plants), LNG (liquid natural gas) storage facility construction, fishing regulations, and so on. By definition, most of these activities go beyond the scope of County regulation; for example, Lane County would be consulted about the development of a power plant in the coastal area, or about offshore drilling off County territory, but final authority to permit or deny such proposals would rest with state and/or federal agencies.

The Goal, recognizing this fact, contains a comprehensive listing of those agencies with authorities over activities likely to affect ocean resources. State and federal agencies are specifically instructed to comply with the concerns of the Goal, and local governments are expected to be participants in the process. No specific local planning requirements are set forth beyond such participation.

Accordingly, no management unit designations are made in this report concerning Goal 19. Instead, some general policy statements are made to guide County action in accordance with Goal mandates.

GENERAL POLICIES

A. Lane County shall participate fully in the review and decision-making process of state and/or federal agencies where ocean resources offshore of Lane County territory are likely to be affected.

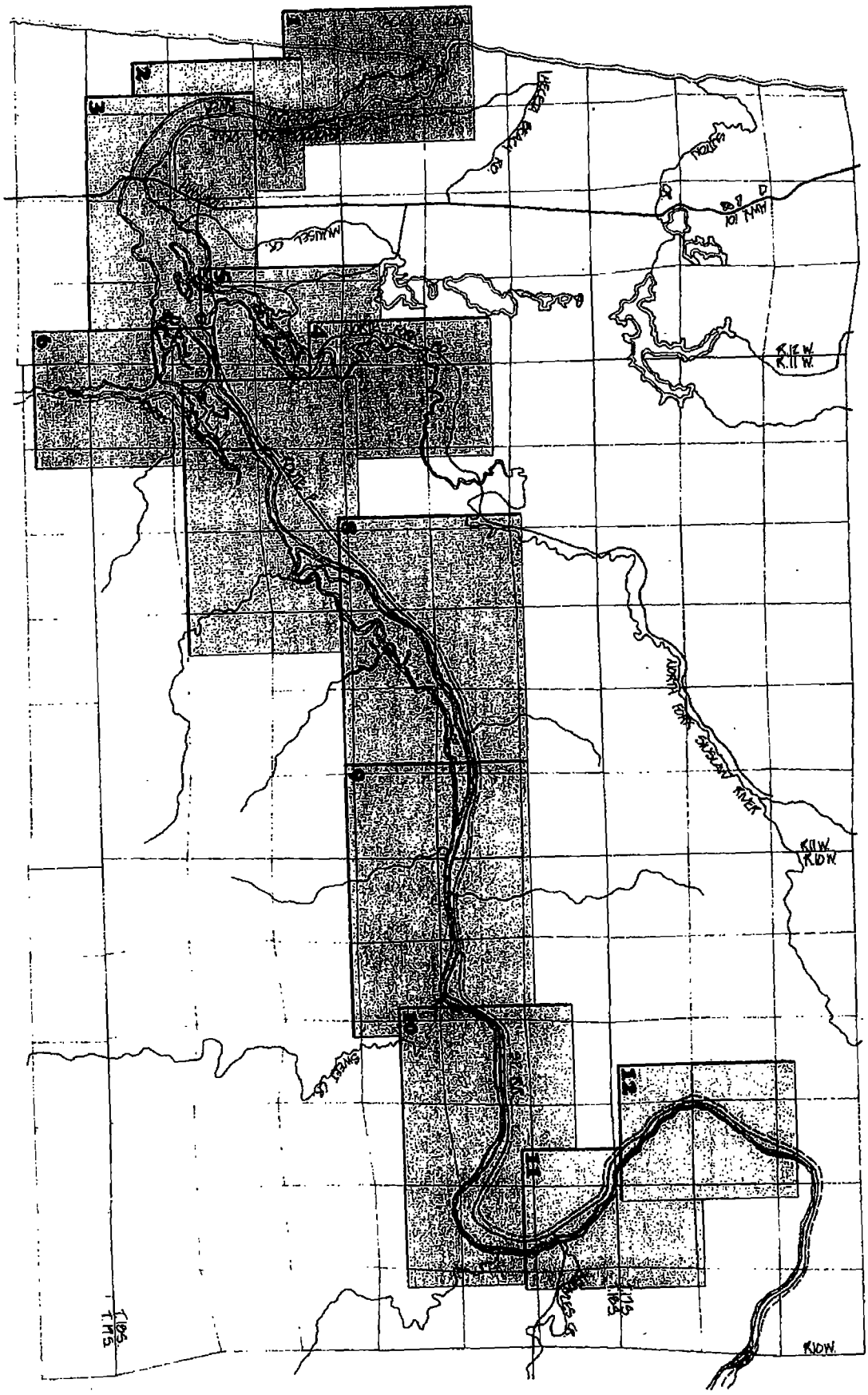
B. Lane County shall cooperate with state and/or federal agencies in developing the necessary information, including inventories and impact assessment, to allow these agencies to properly evaluate proposed actions and make decisions about whether or not to allow such actions.

C. The County should consult with state and/or federal agencies having responsibilities under this Goal if actions are proposed within the County

(and for which the County has all or partial approval authority) which are likely to impact the quality of ocean resources in the area.

D. The County should build and maintain an "information bank" consisting of state- or federally-generated information about ocean resources, using such information as it is supplied to the County. This information should be made available to County decision-makers in evaluating proposals which may affect ocean resources.

E. Programs or regulations arising from County compliance with LCDC Coastal Goals 16 through 18 should be cognizant of, and seek to enhance the quality of, ocean resources as defined in Goal 19.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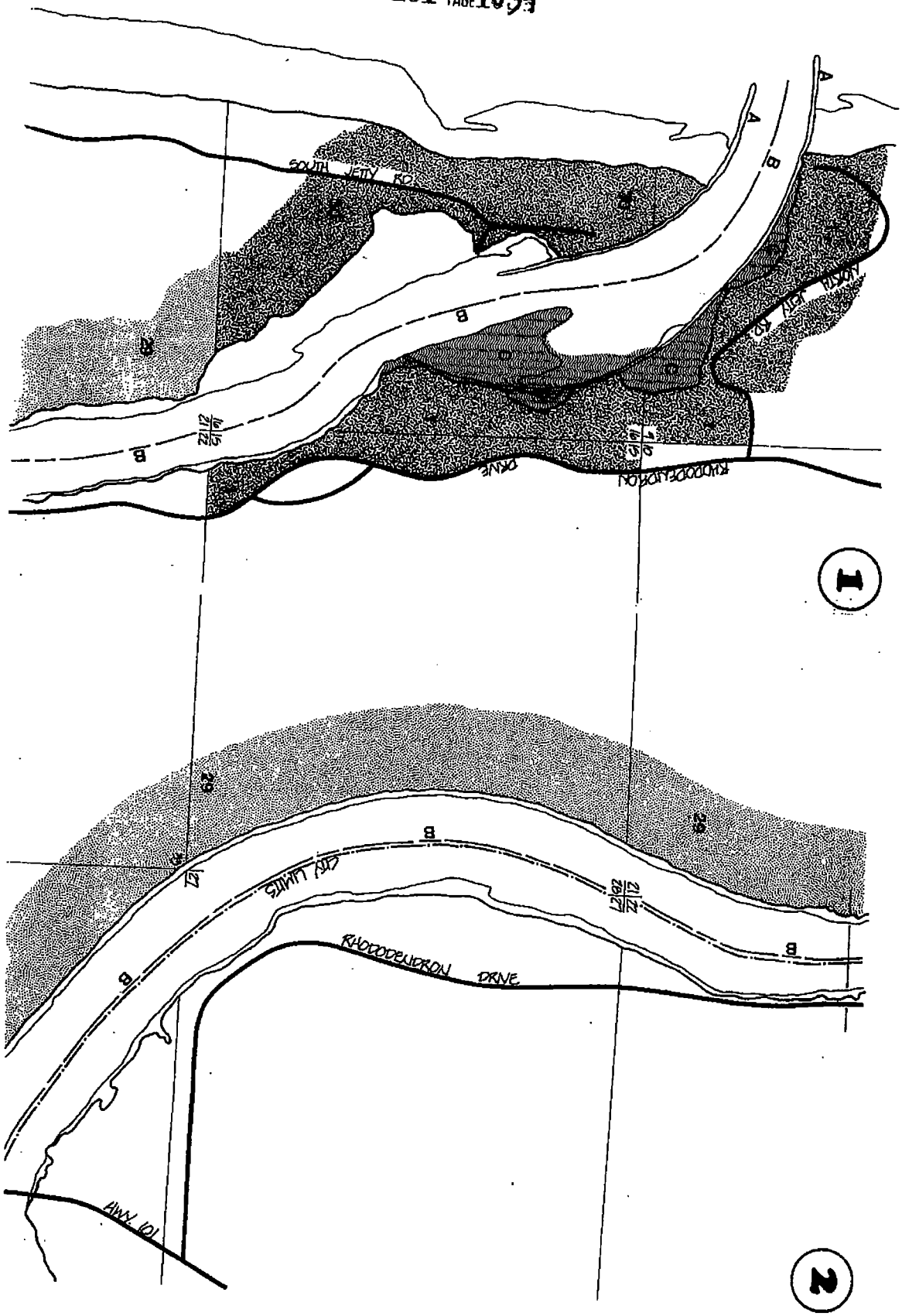
T.11 S.

SHORELANDS (ESTUARY)

- NATURAL RESOURCE PRESERVATION
- SIGNIFICANT NATURAL AREA
- MIXED DEVELOPMENT
- RESIDENTIAL DEVELOPMENT
- PRIME WILDLIFE AREA

ESTUARY MANAGEMENT UNITS.

- SEE TEXT DEVELOPMENT
- SEE TEXT CONSERVATION
- NATURAL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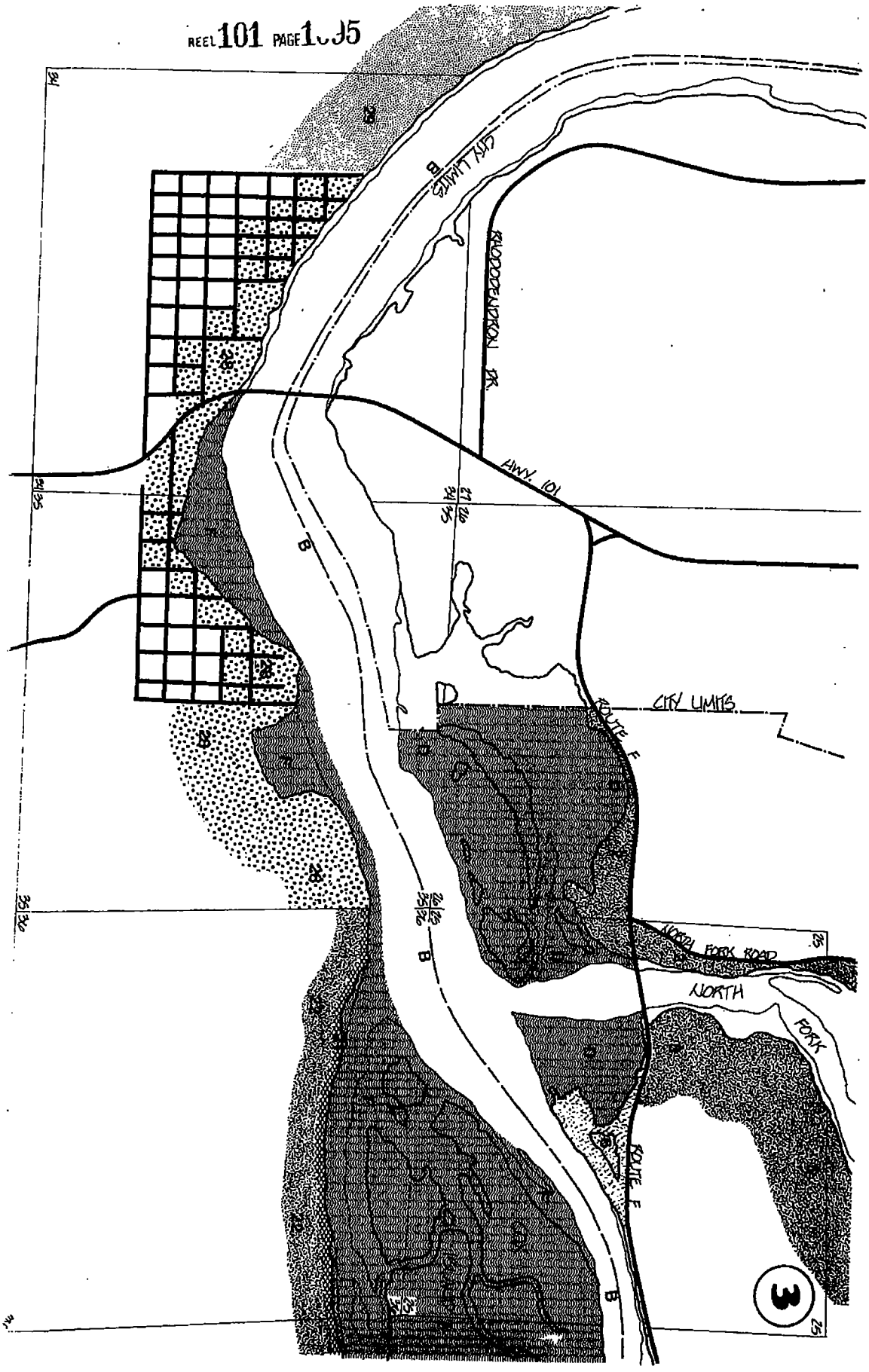
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ROUTE F
NORTH FORK ROAD
NORTH
FORK
ROUTE F
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4
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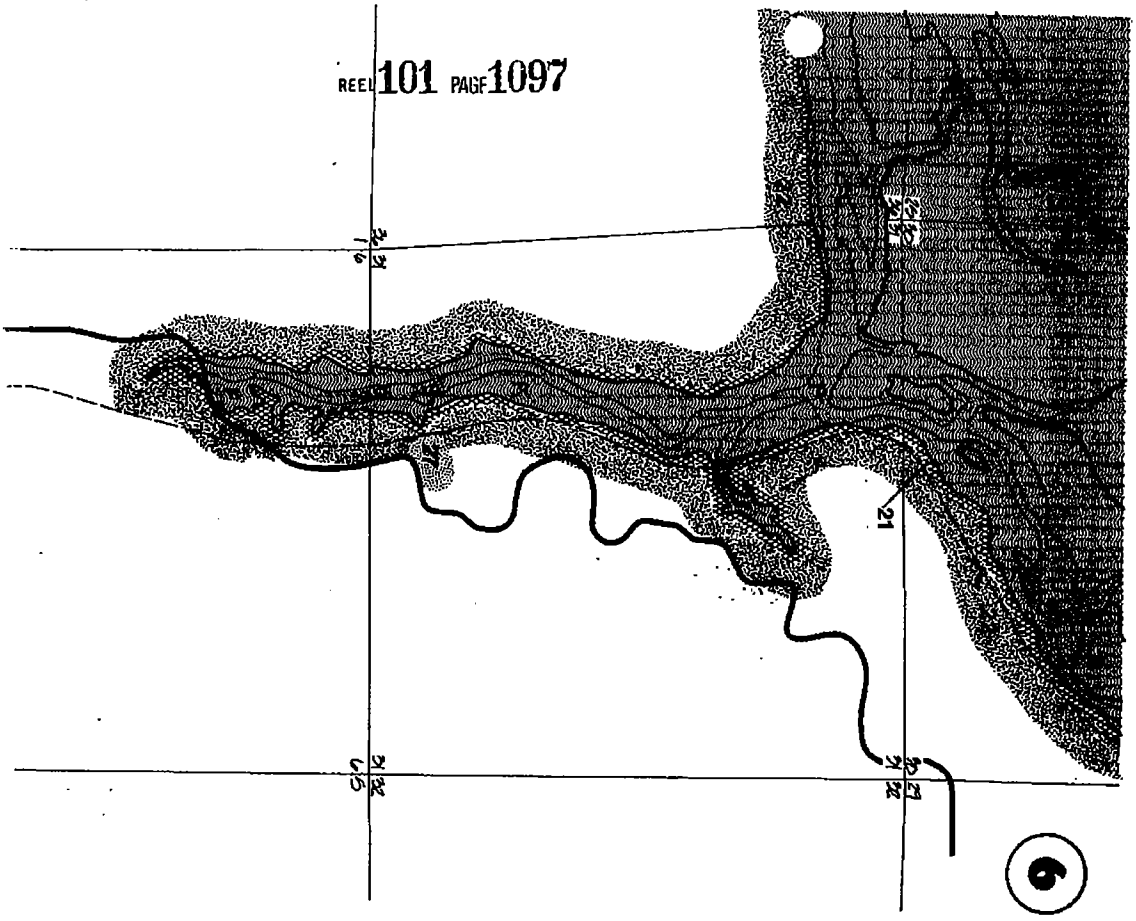
NORTH FORK ROAD
MUNBEL LAKE ROAD
ROUTE 1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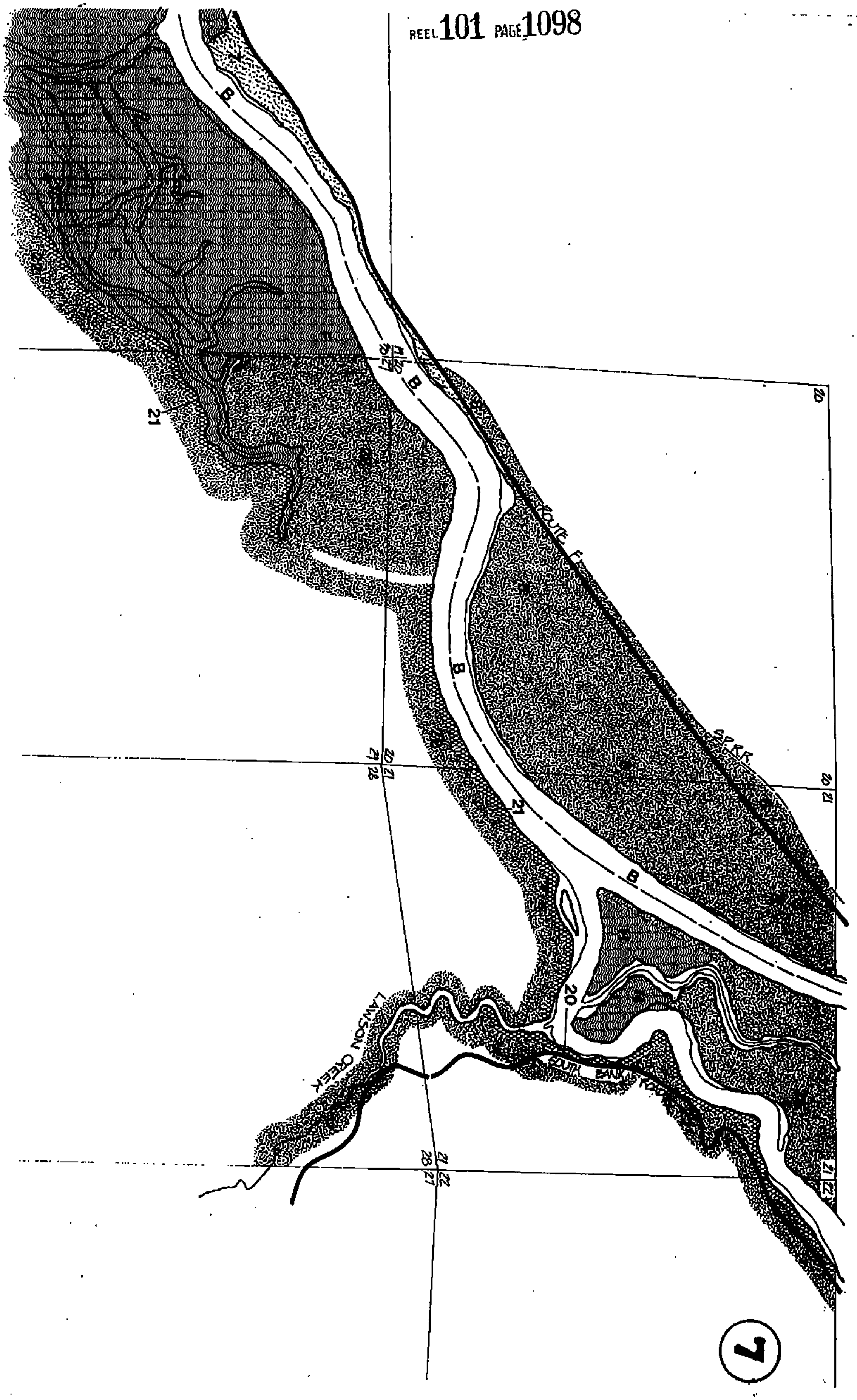
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S.P.R.R.
LAWSON CREEK
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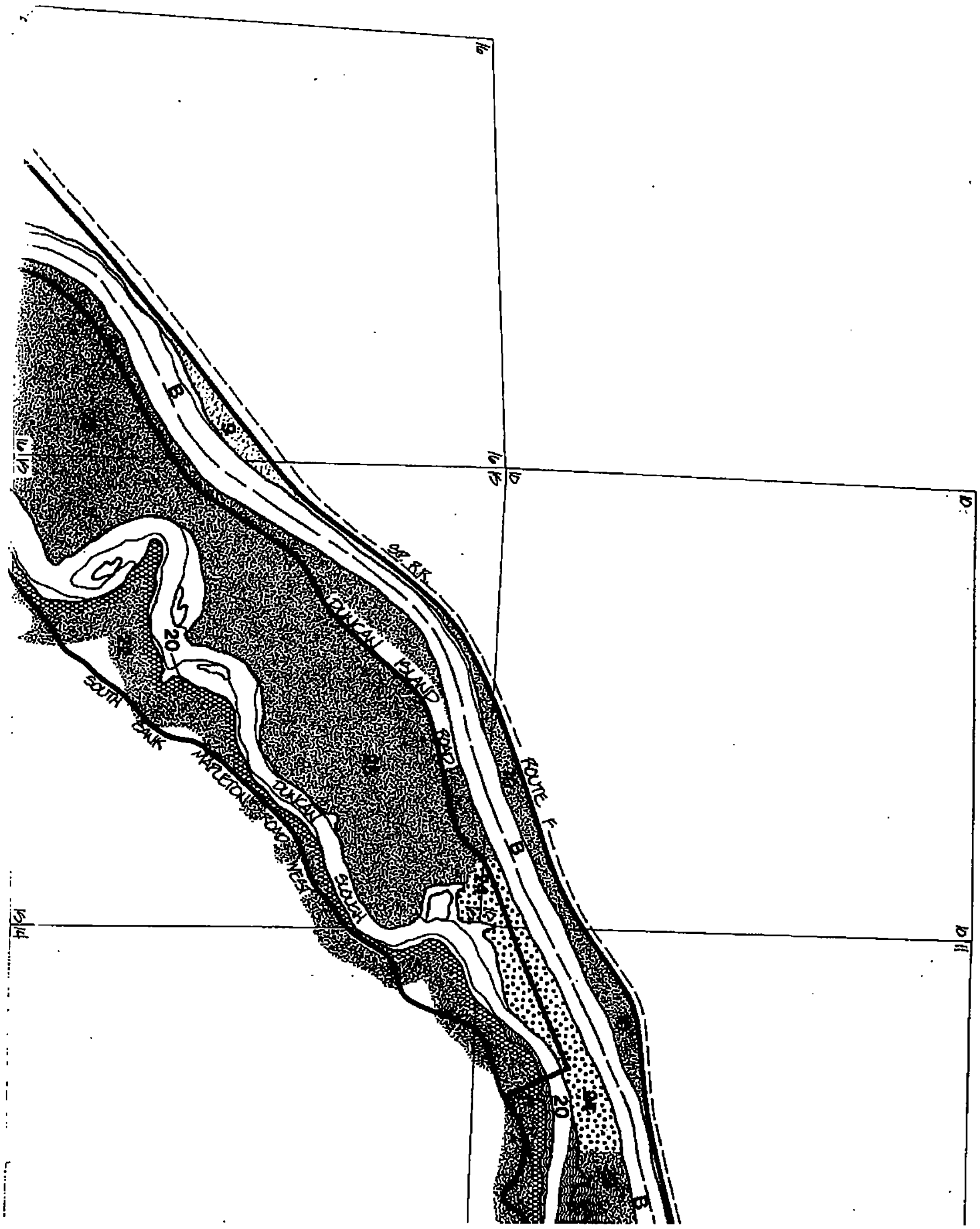
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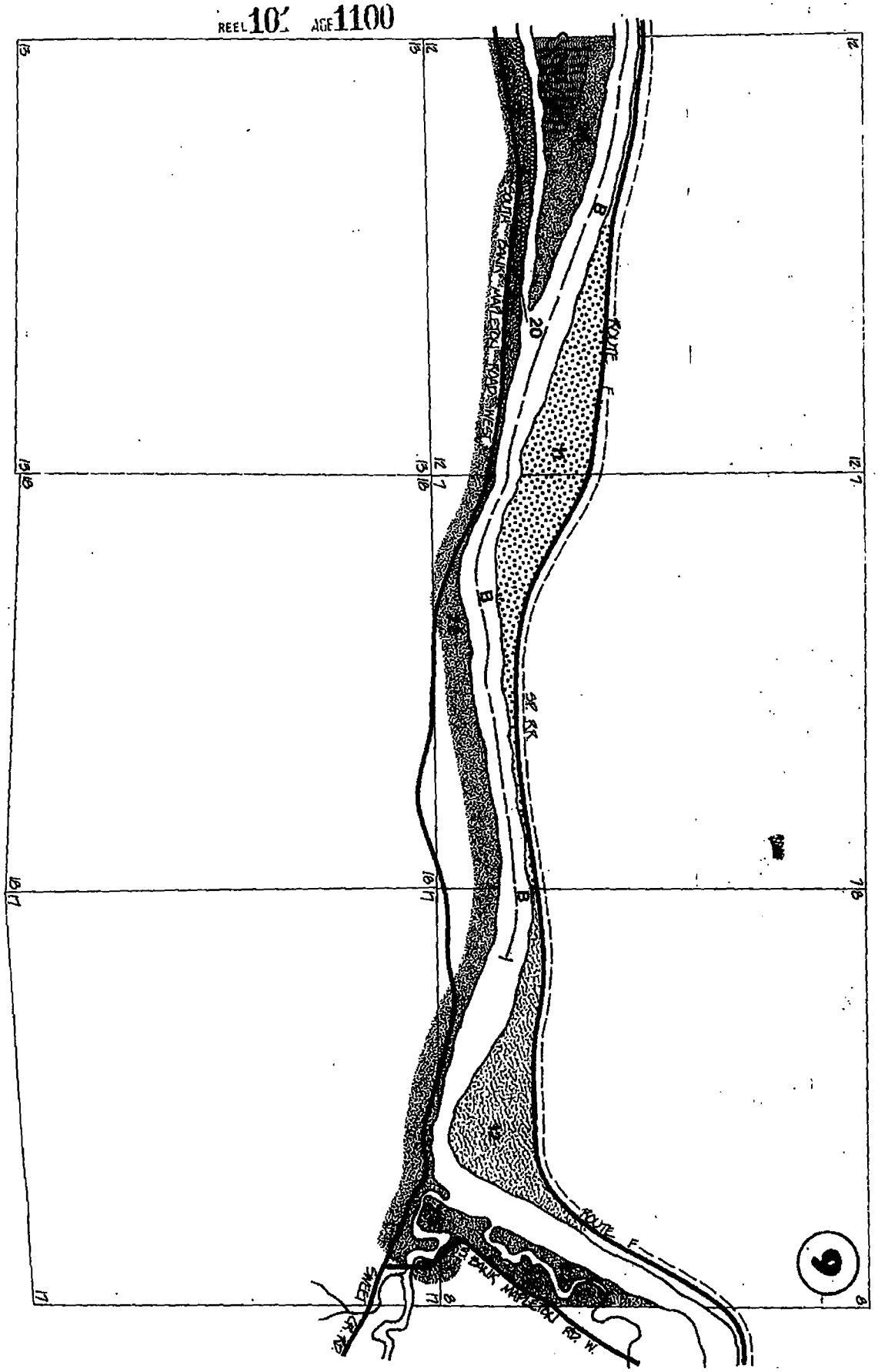
OAK
DUNCAN
SLOUGH
20
B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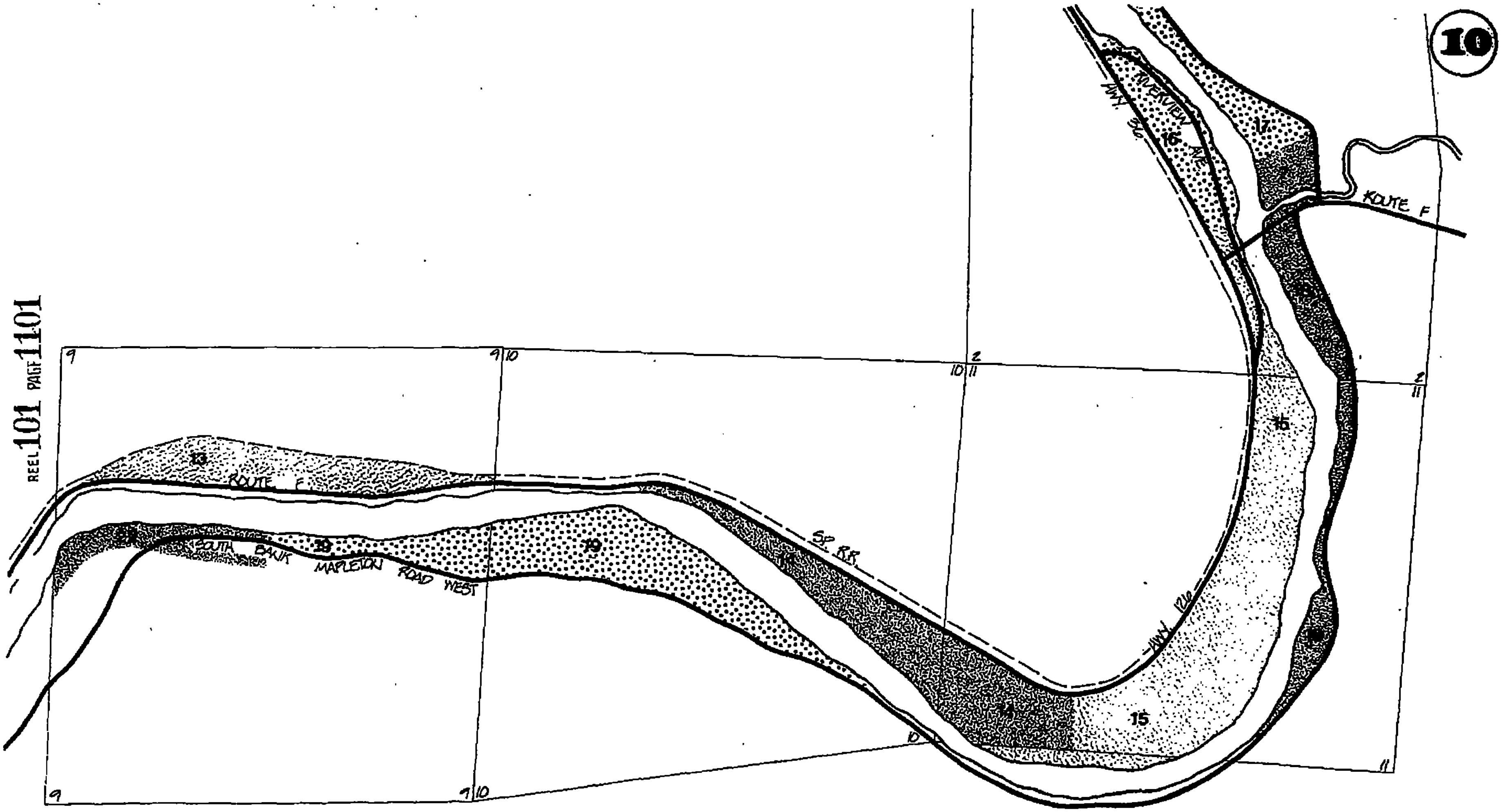
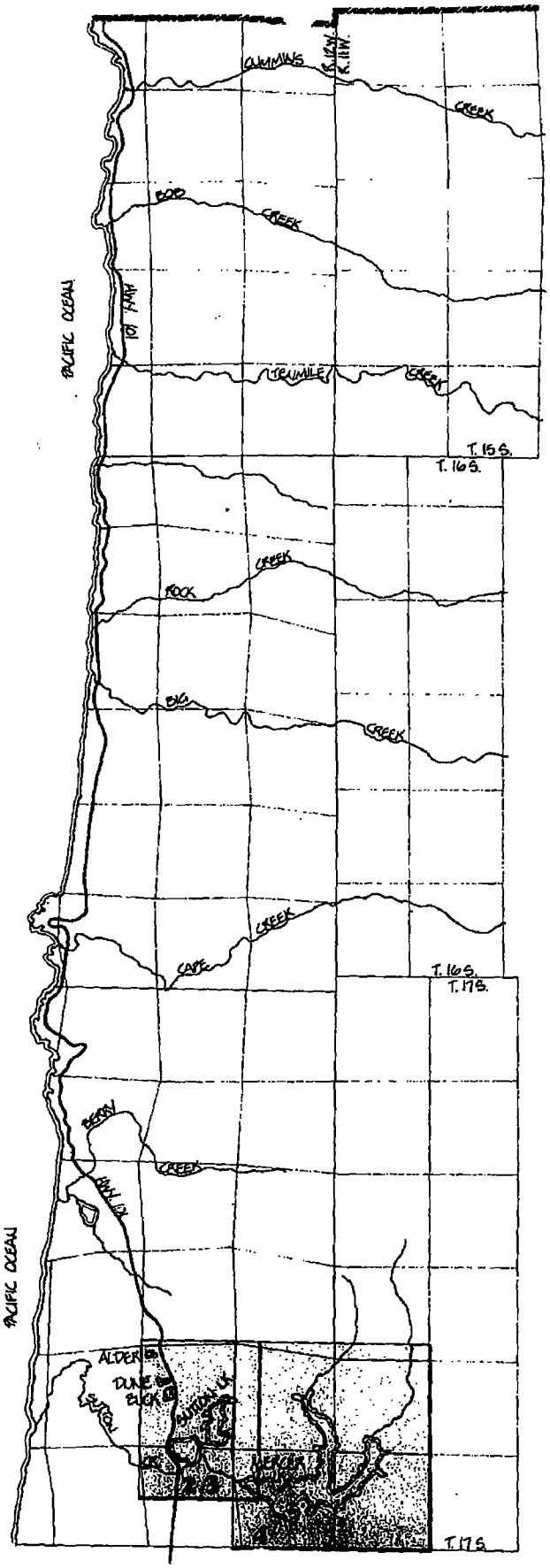
ROUTE F
ROUTE F
ST. PAUL MARSHALL RD. W.
6



REEL 101 PAGE 1101

REEL 161 PAGE 1102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CREEK
PACIFIC OCEAN
HWY 101
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CREEK
T. 15 S.
T. 16 S.
ROCK
CREEK
BIG
CREEK
CAPE
CREEK
T. 16 S.
T. 17 S.
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HALL
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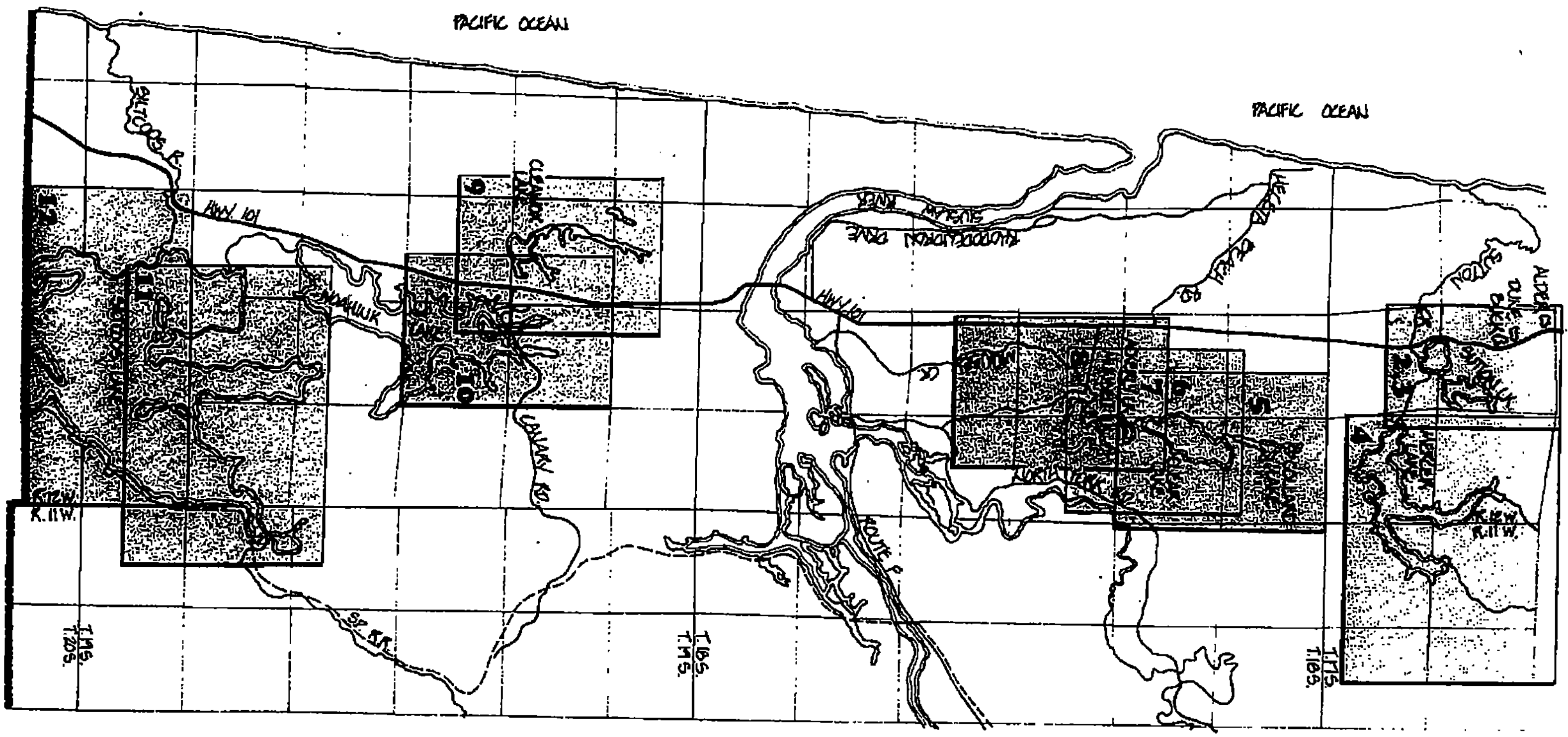
ALDER
DUNE
BLACK
BUTTON
LAKE
MERCER
T. 17 S.



REEL 01 PAGE 1104

COASTAL LAKES

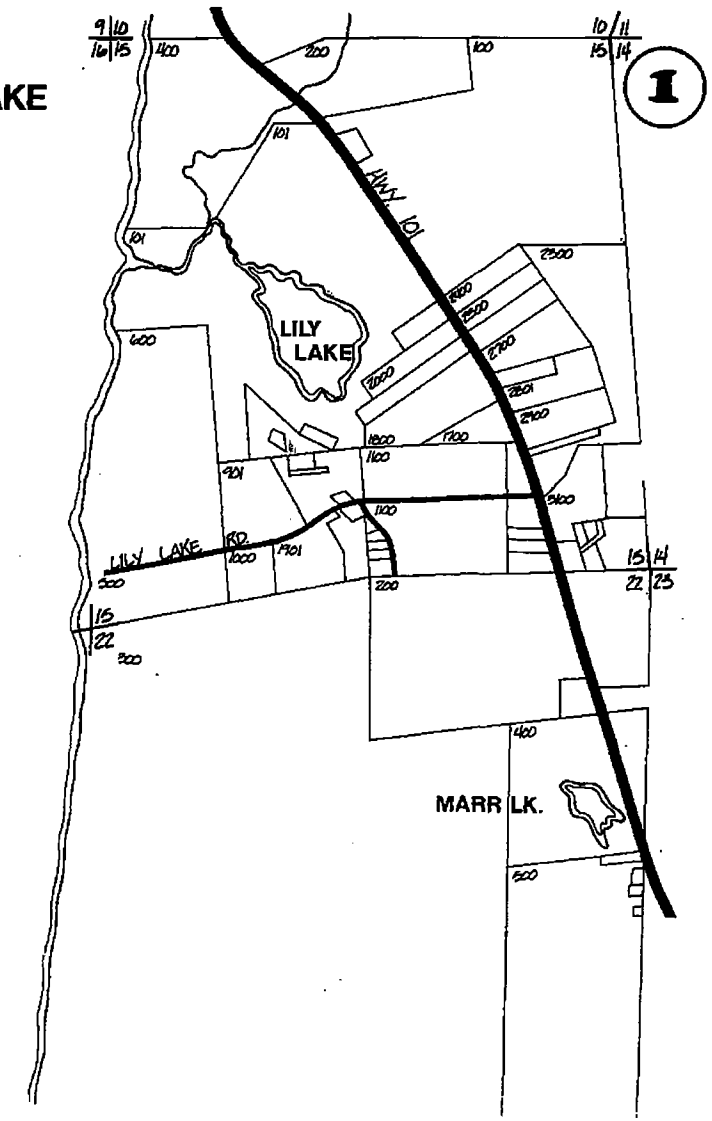
SIGNIFICANT NATURAL AREA

NATURAL RESOURCE PRESERVATION

PRIME WILDLIFE AREA

RESIDENTIAL DEVELOPMENT

LILY LAKE



DUNE, BUCK & ALDER LAKES

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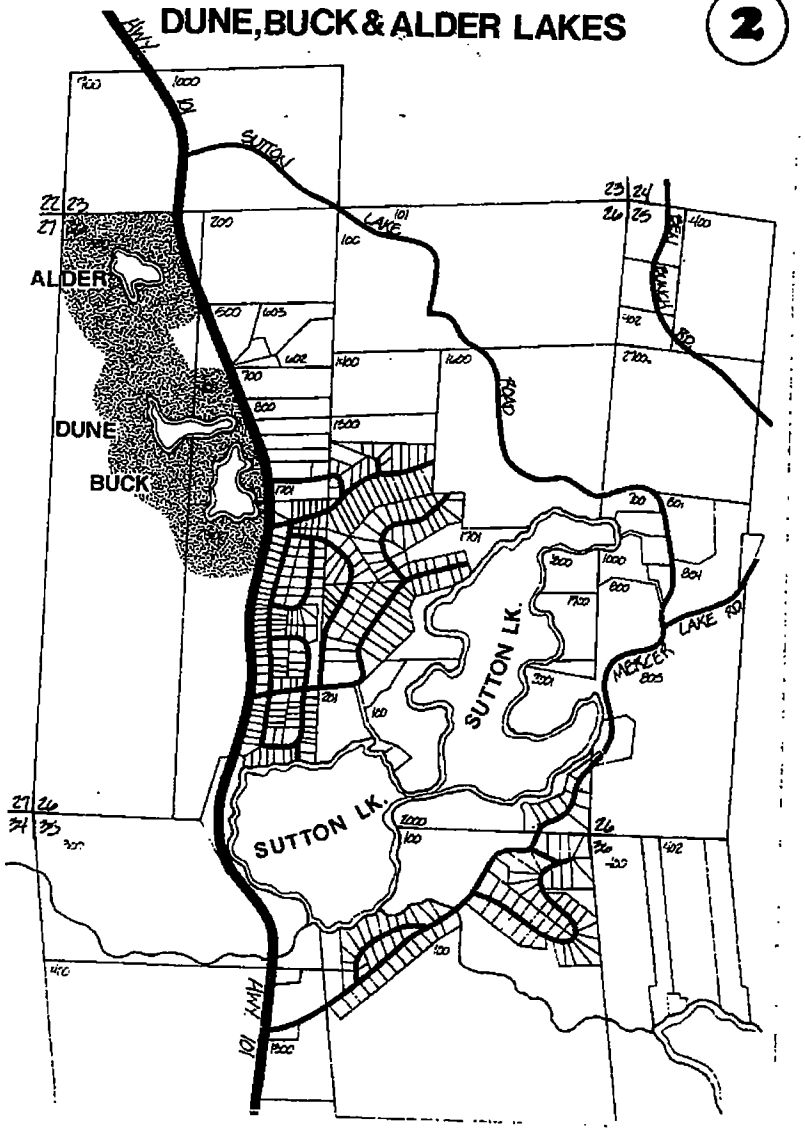

SUTTON LAKE

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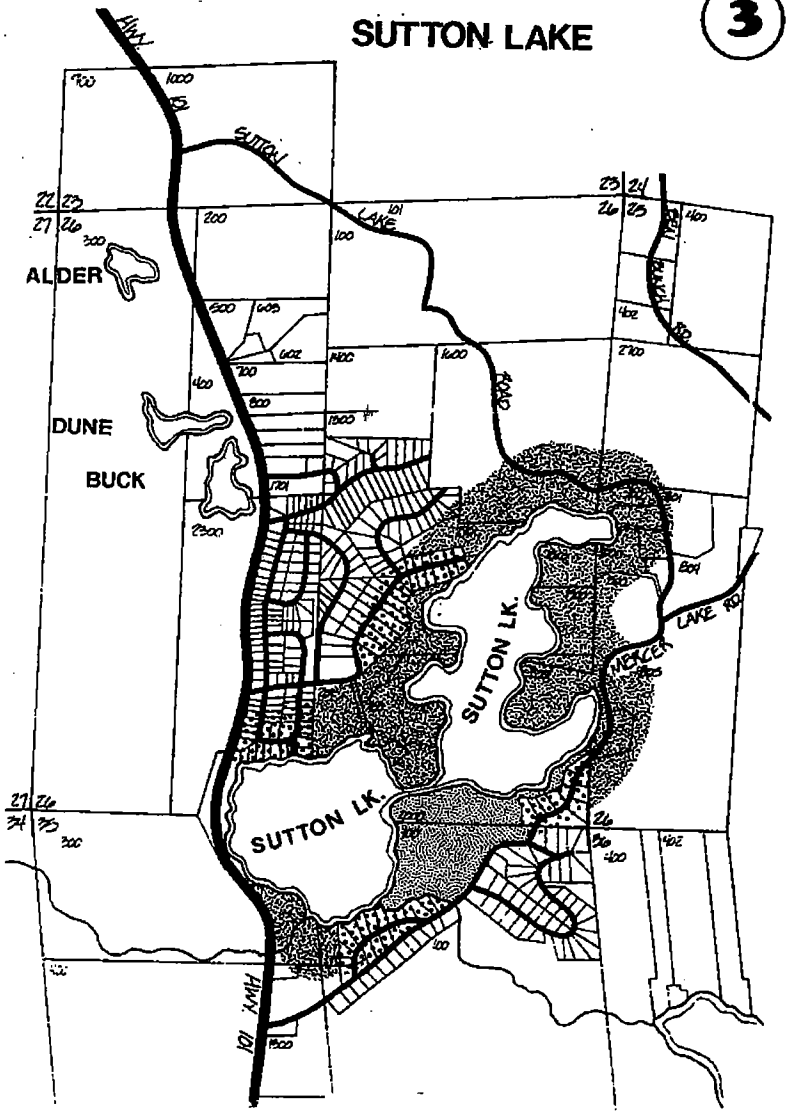

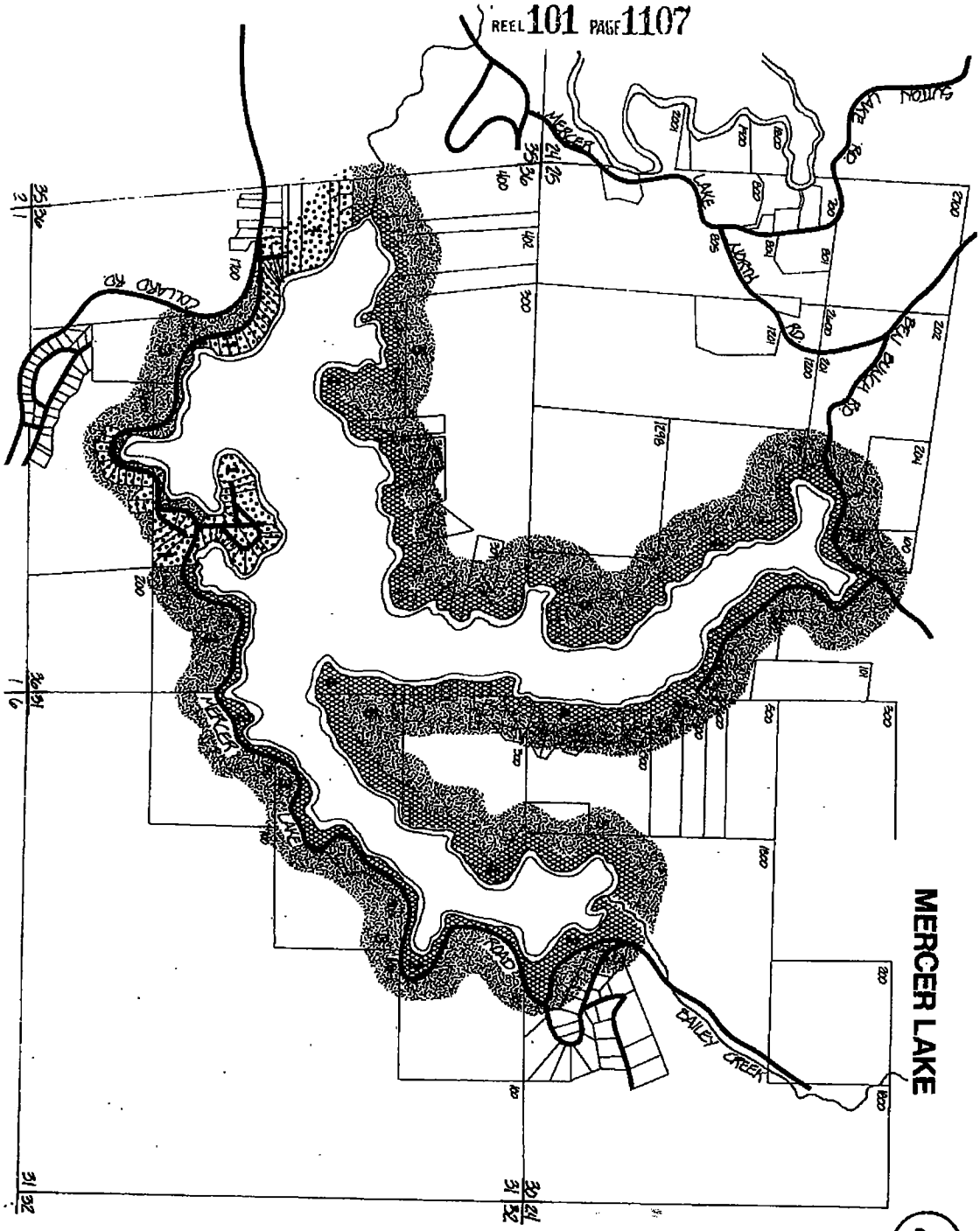
MERCER LAKE
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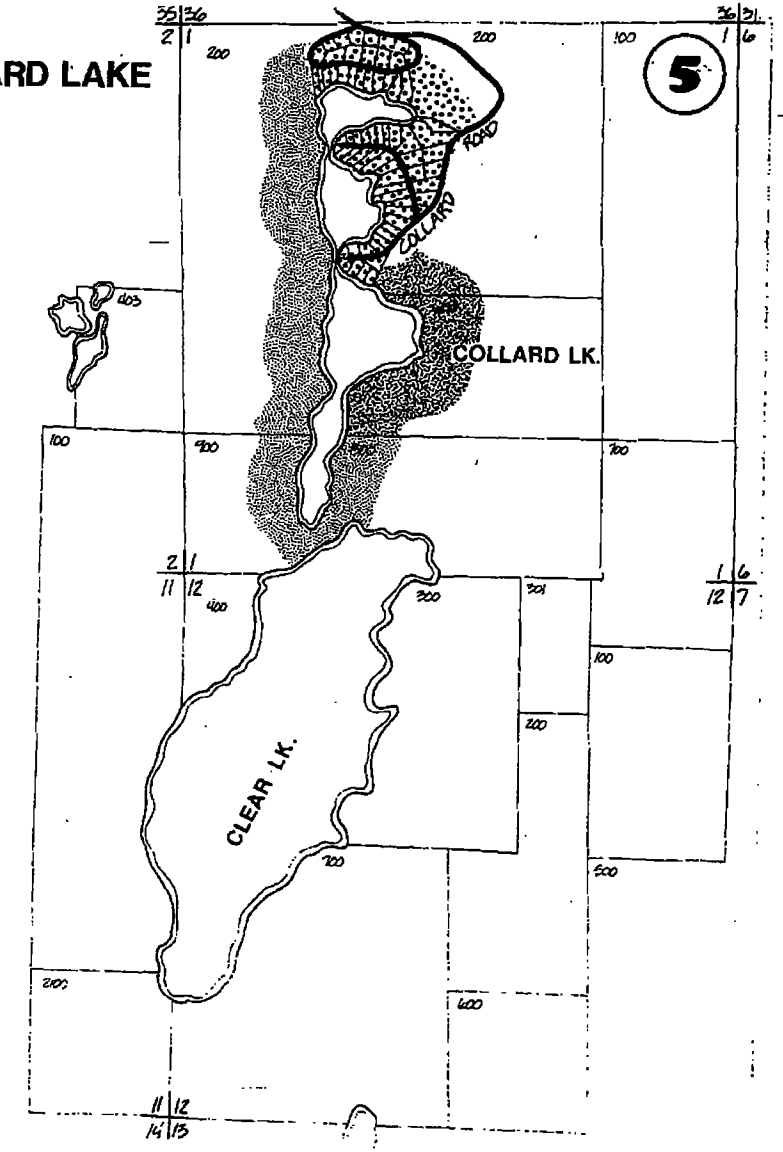
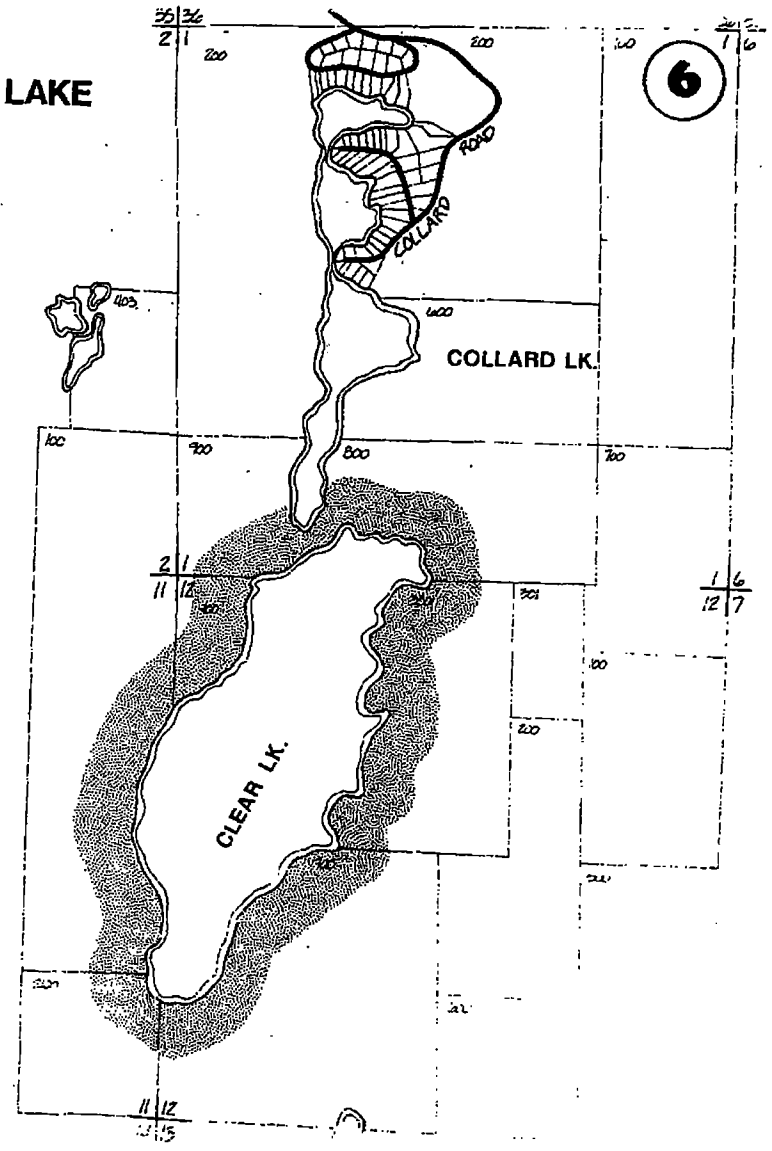
REEL 101 PAGE 1108

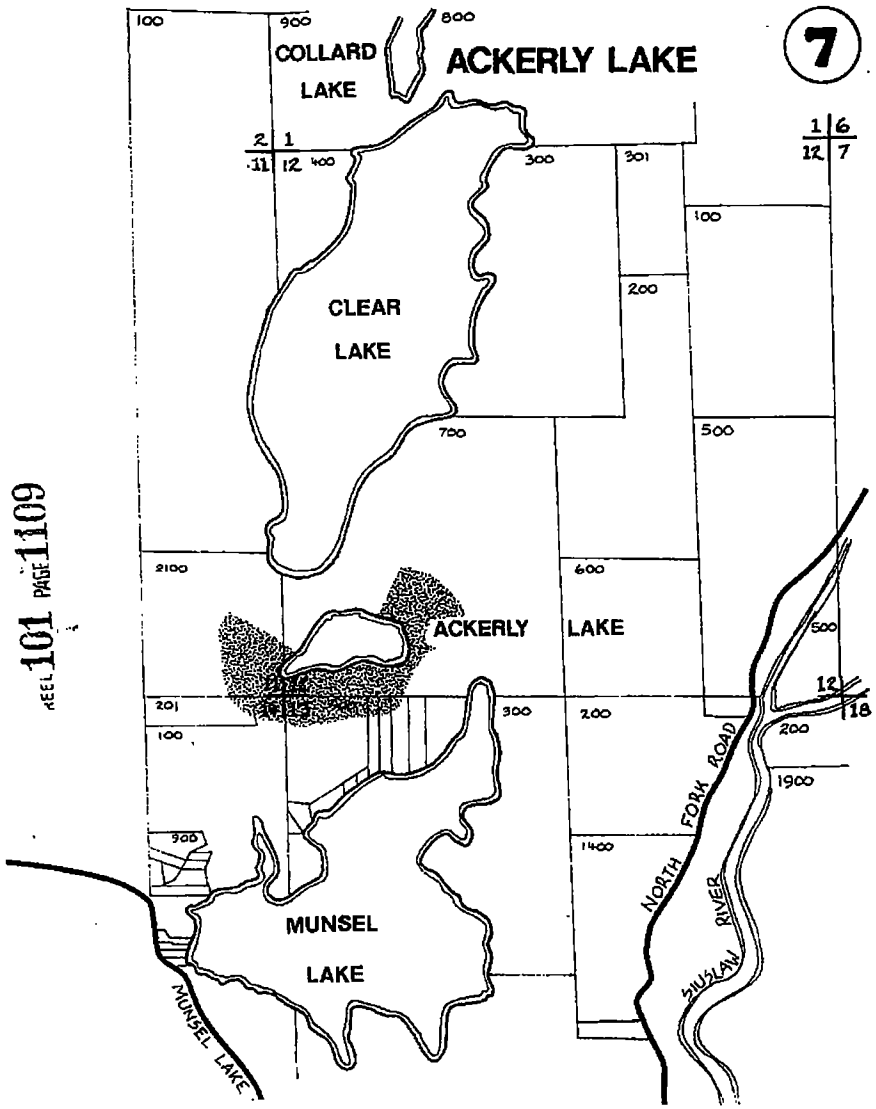
COLLARD LAKE

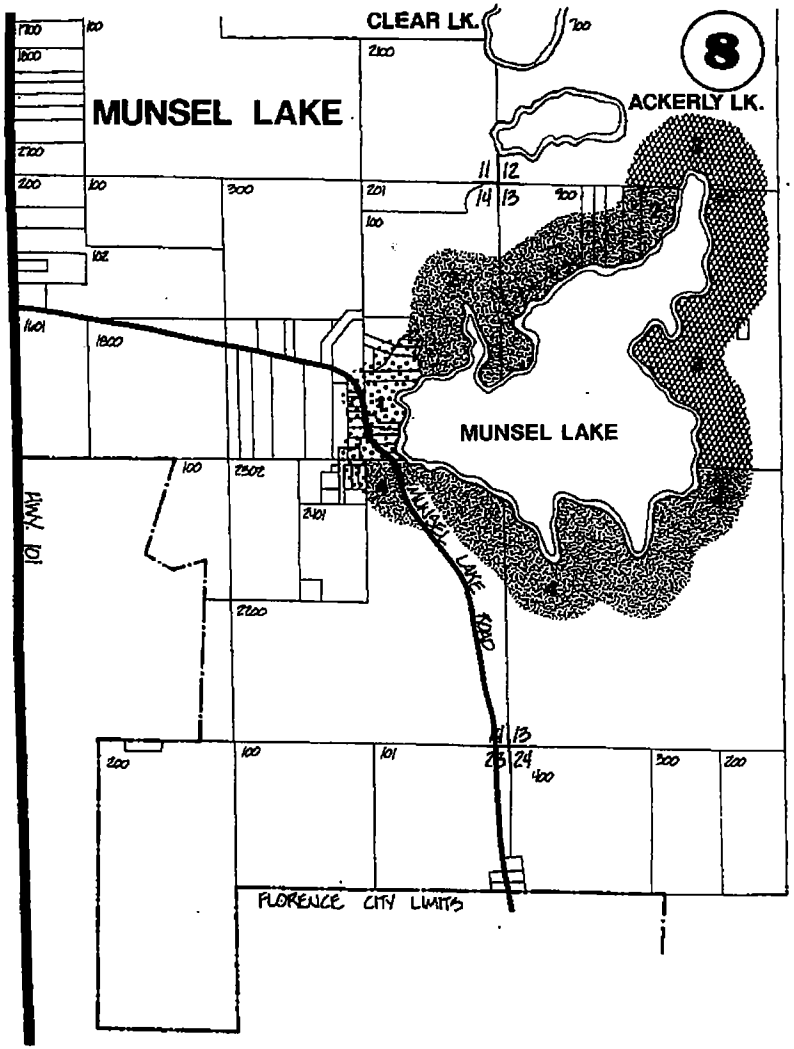


CLEAR LAKE

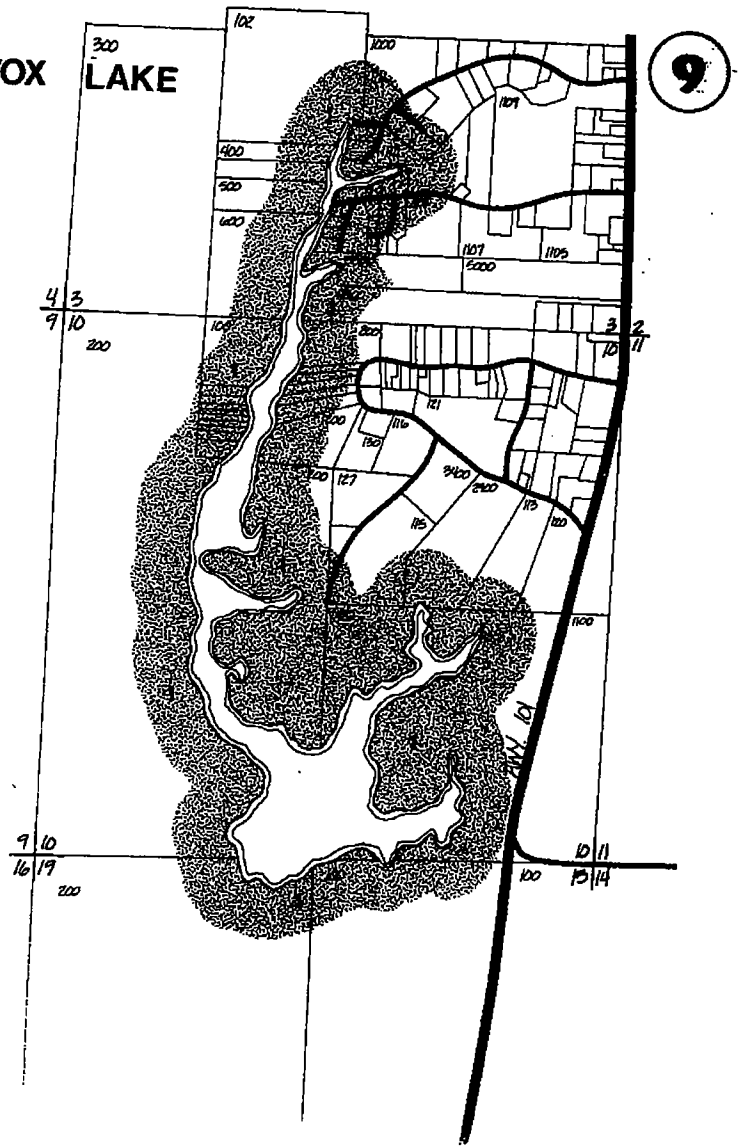


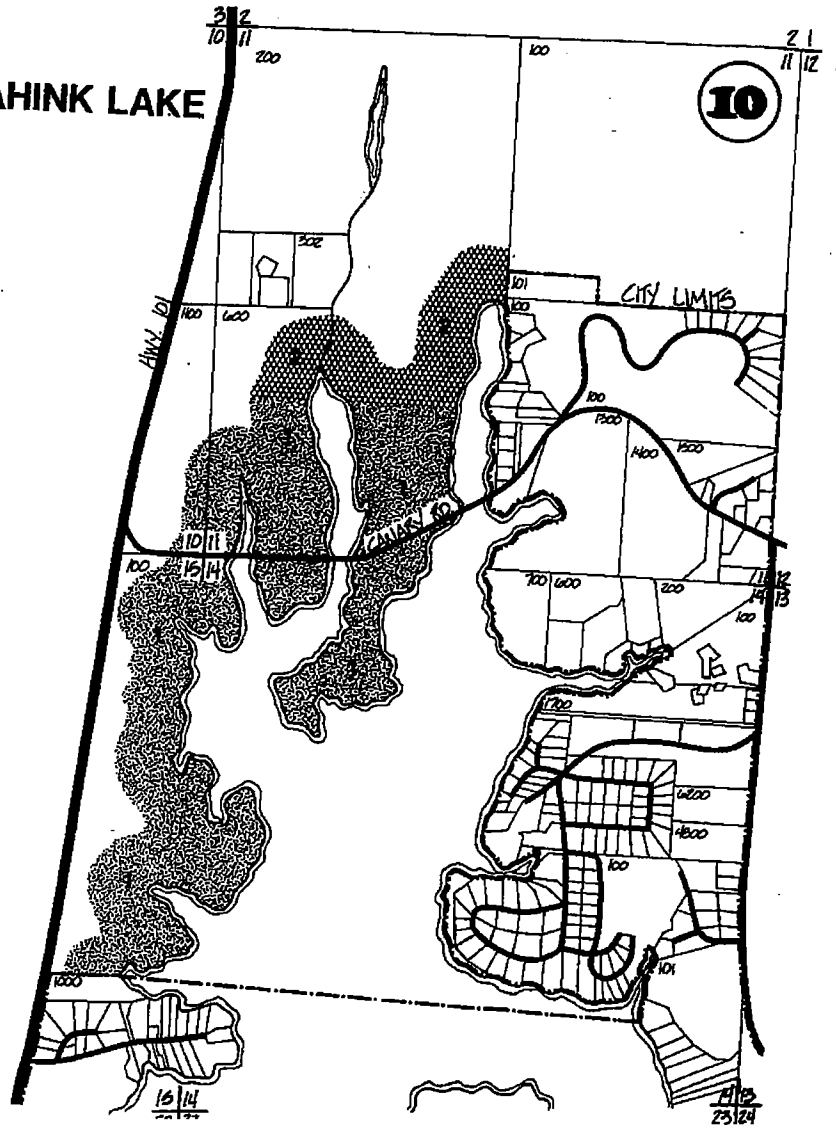
REEL 101 PAGE 1109





REEL 101 PAGE 1110

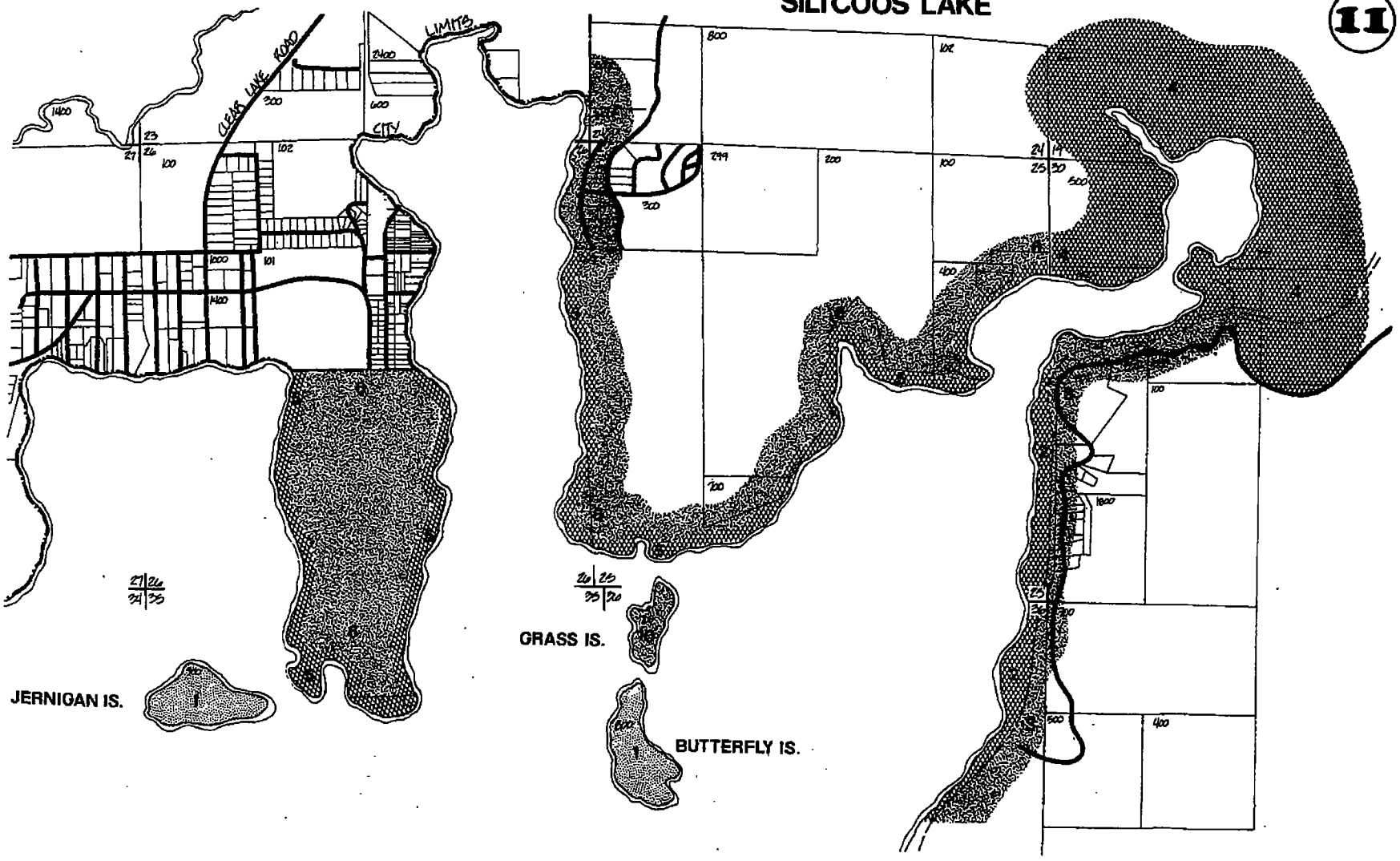


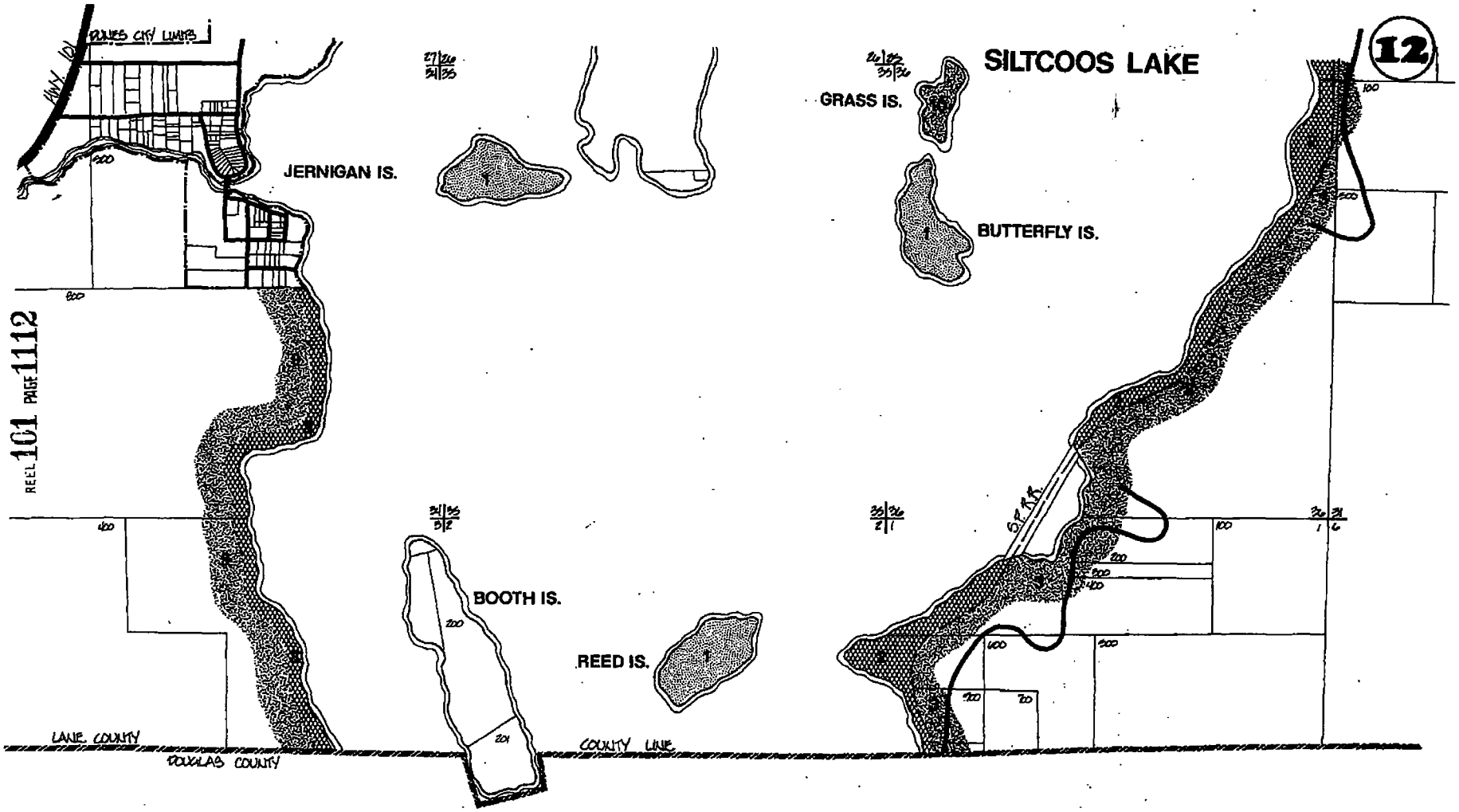


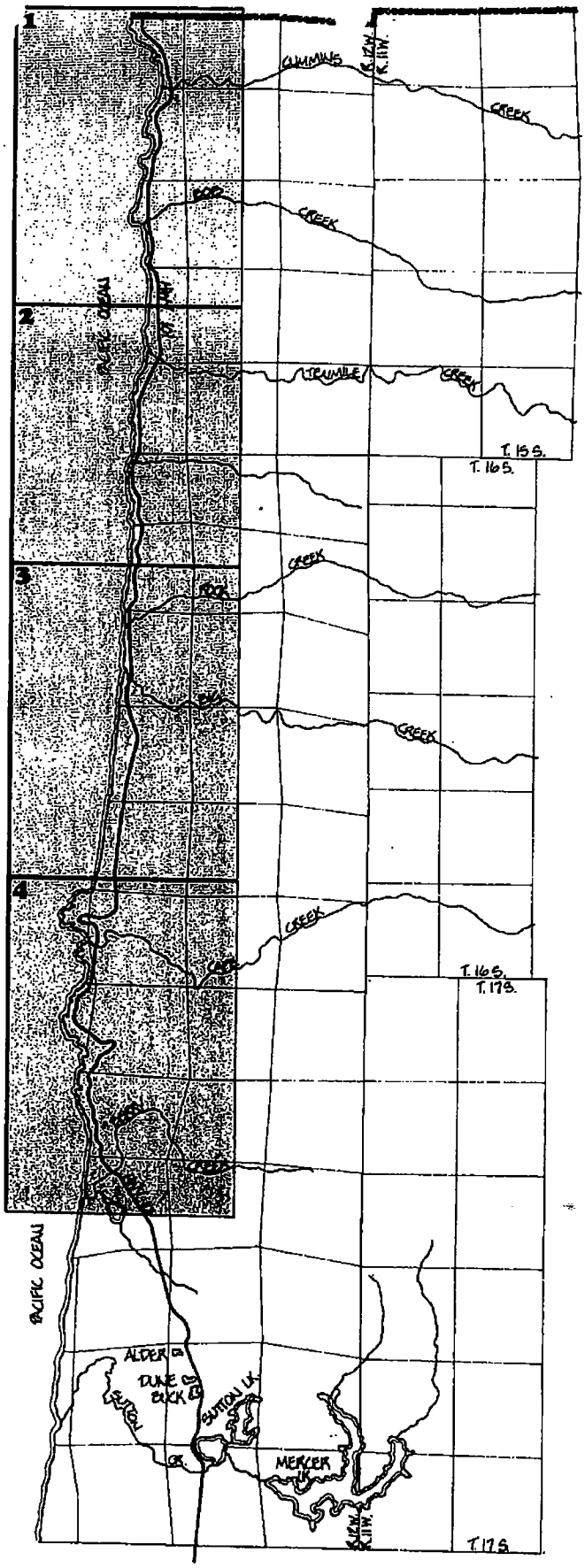
EL 101 PAGE 1111

SILTCOOS LAKE

11



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CUMMINS
CREEK
ROCK
CREEK
TRUMBLE
CREEK
T. 15 S.
T. 16 S.
ROCK
CREEK
CREEK
CREEK
T. 16 S.
T. 17 S.
PACIFIC OCEAN
ALDER
DUNE
BUCK
SUTTON LK
MERCER
LK.
R. 12 W.
R. 11 W.
T. 17 S.

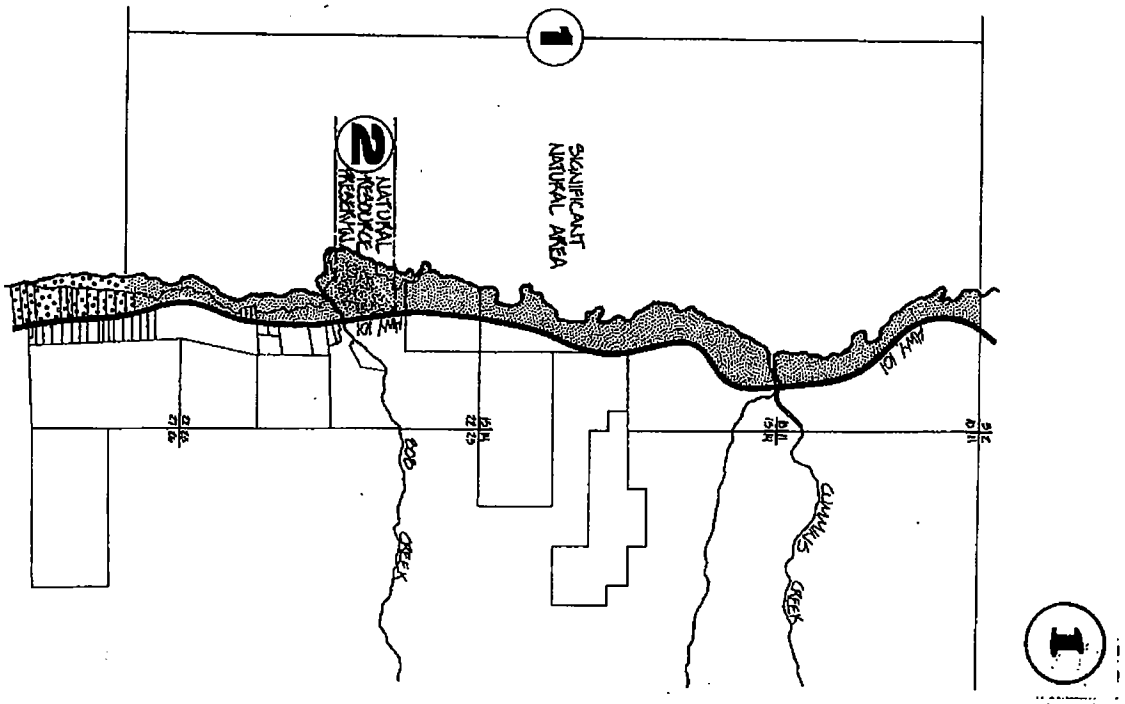
SHORELANDS (OCEAN)


NATURAL RESOURCE PRESERVATION


SIGNIFICANT NATURAL AREA


PRIME WILDLIFE AREA


RESIDENTIAL DEVELOPMENT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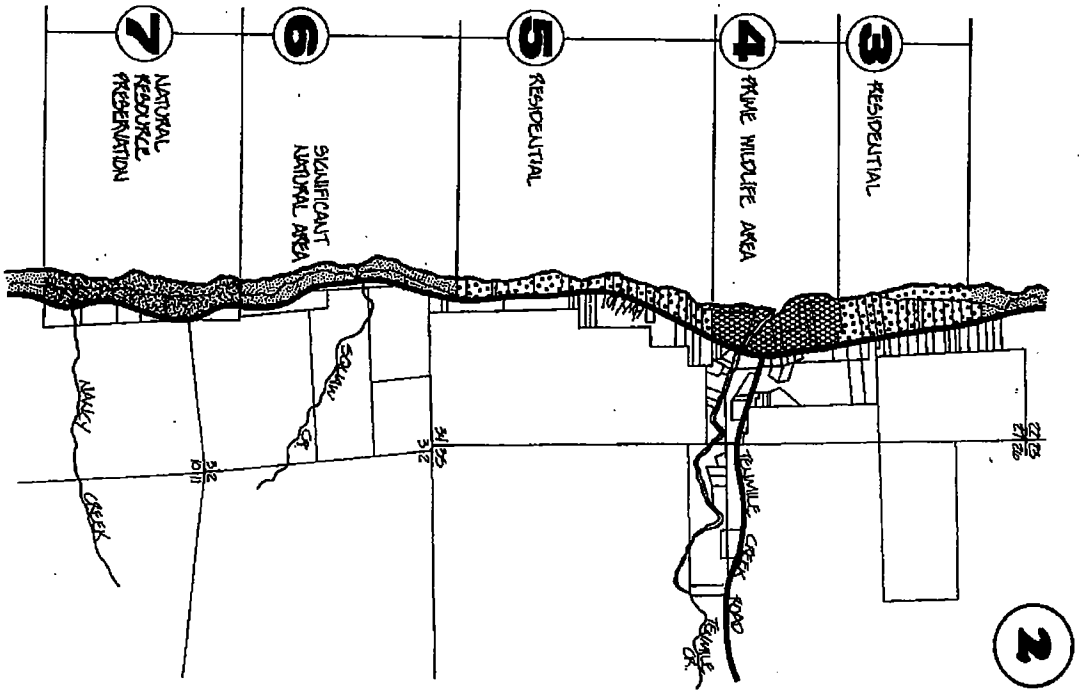
SIGNIFICANT NATURAL AREA
100 YEAR
100 YEAR
ECO CREEK
CUMMINS CREEK

1


7
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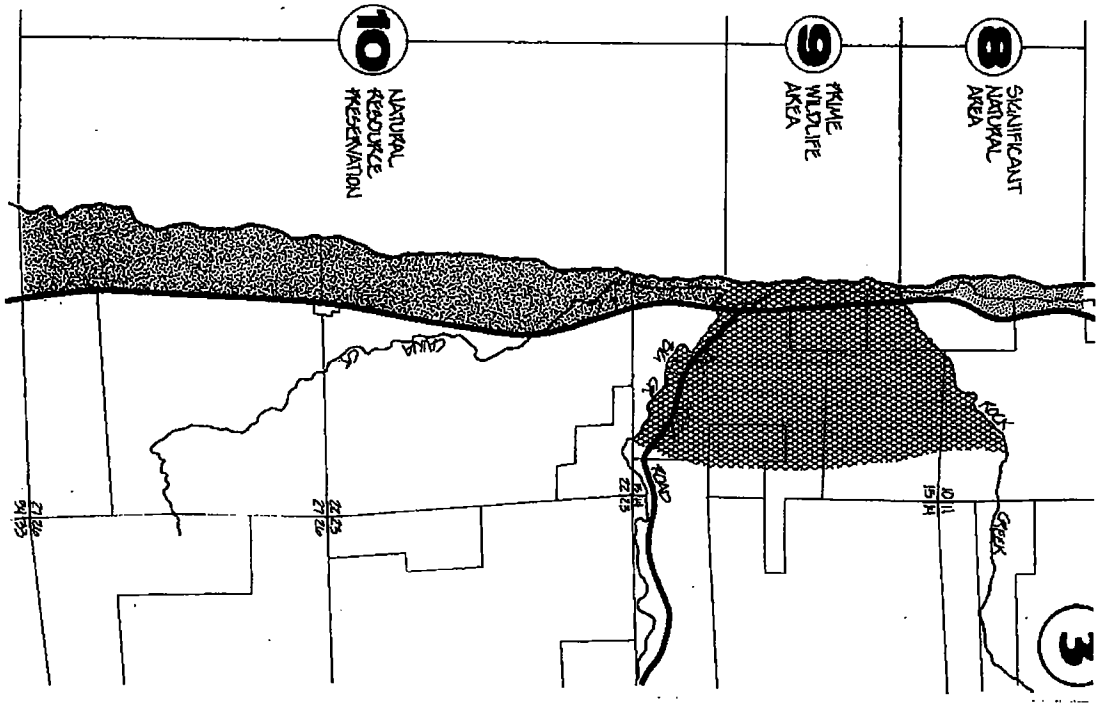
NATURAL RESOURCE PRESERVATION
SIGNIFICANT NATURAL AREA
RESIDENTIAL
PRIME WILDLIFE AREA
RESIDENTIAL
SQUAW CR
MAPLE CREEK
TENMILE CREEK ROAD

2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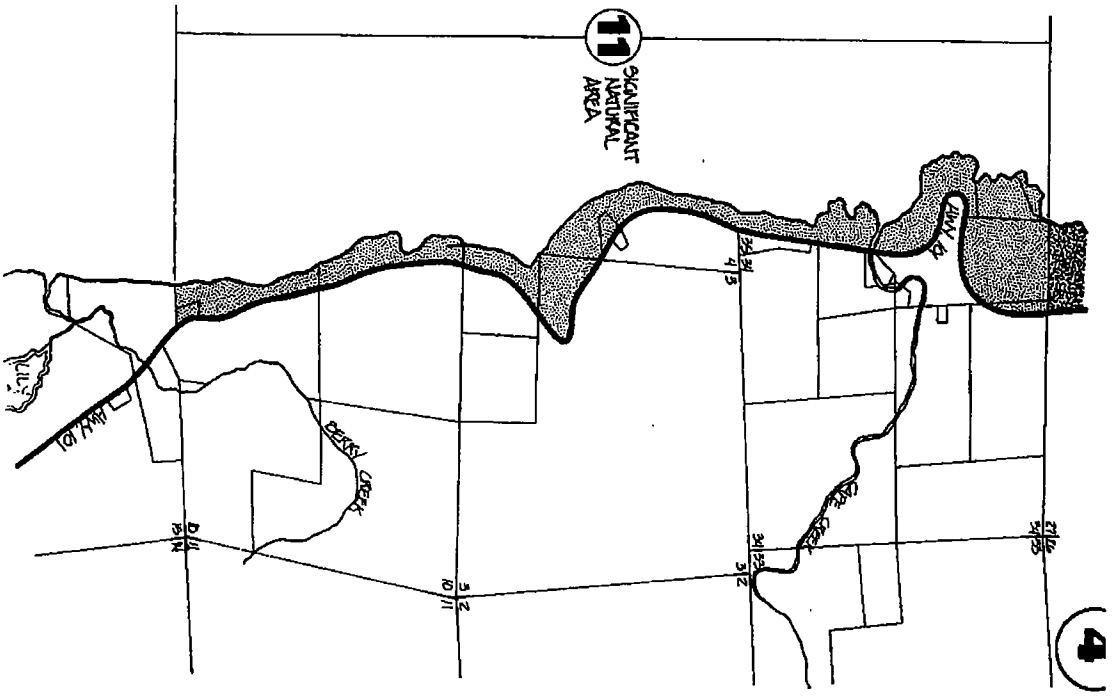
NATURAL RESOURCE PRESERVATION
9
FRUME WILDLIFE AREA
8
SIGNIFICANT NATURAL AREA
3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SIGNIFICANT NATURAL AREA
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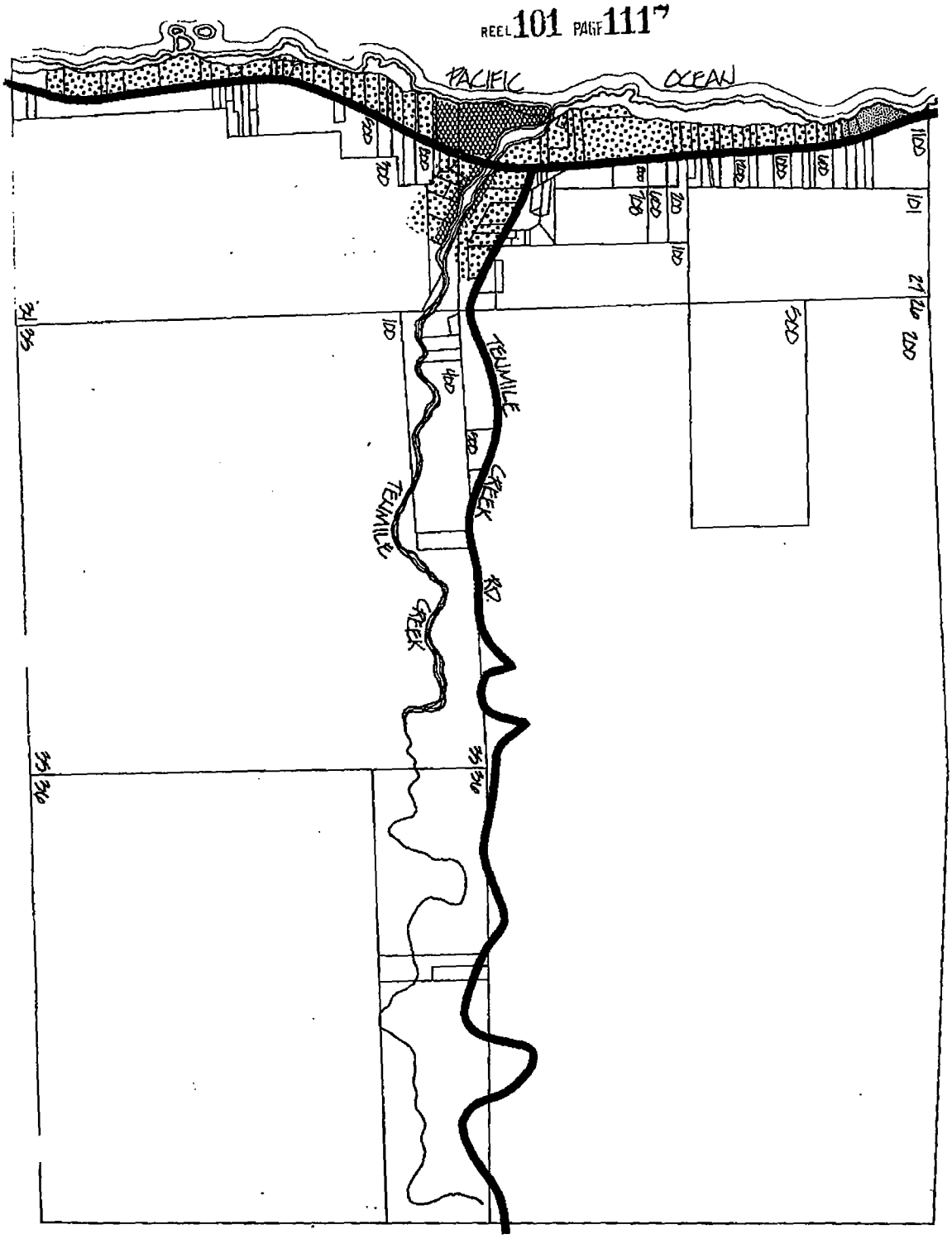
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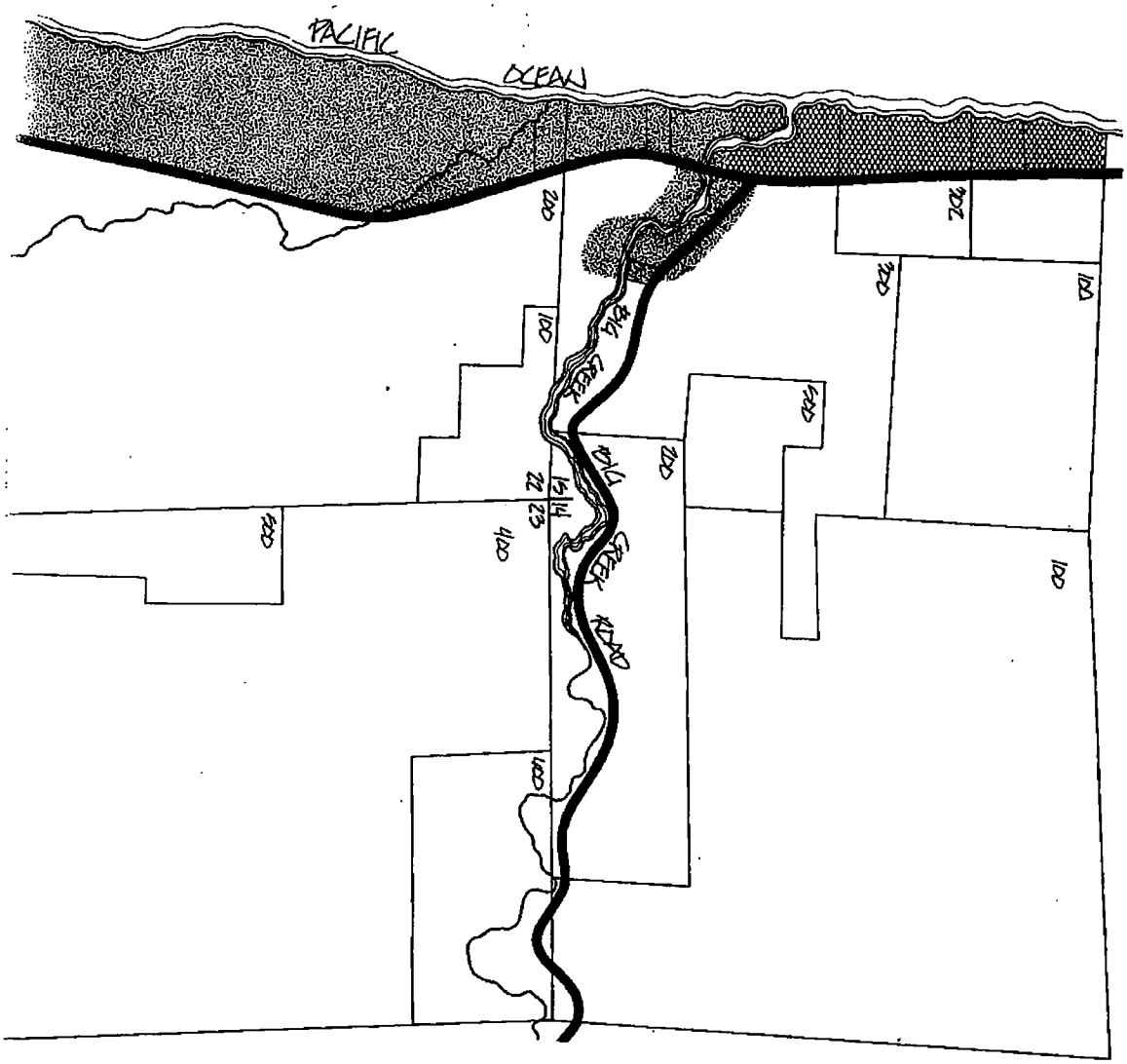
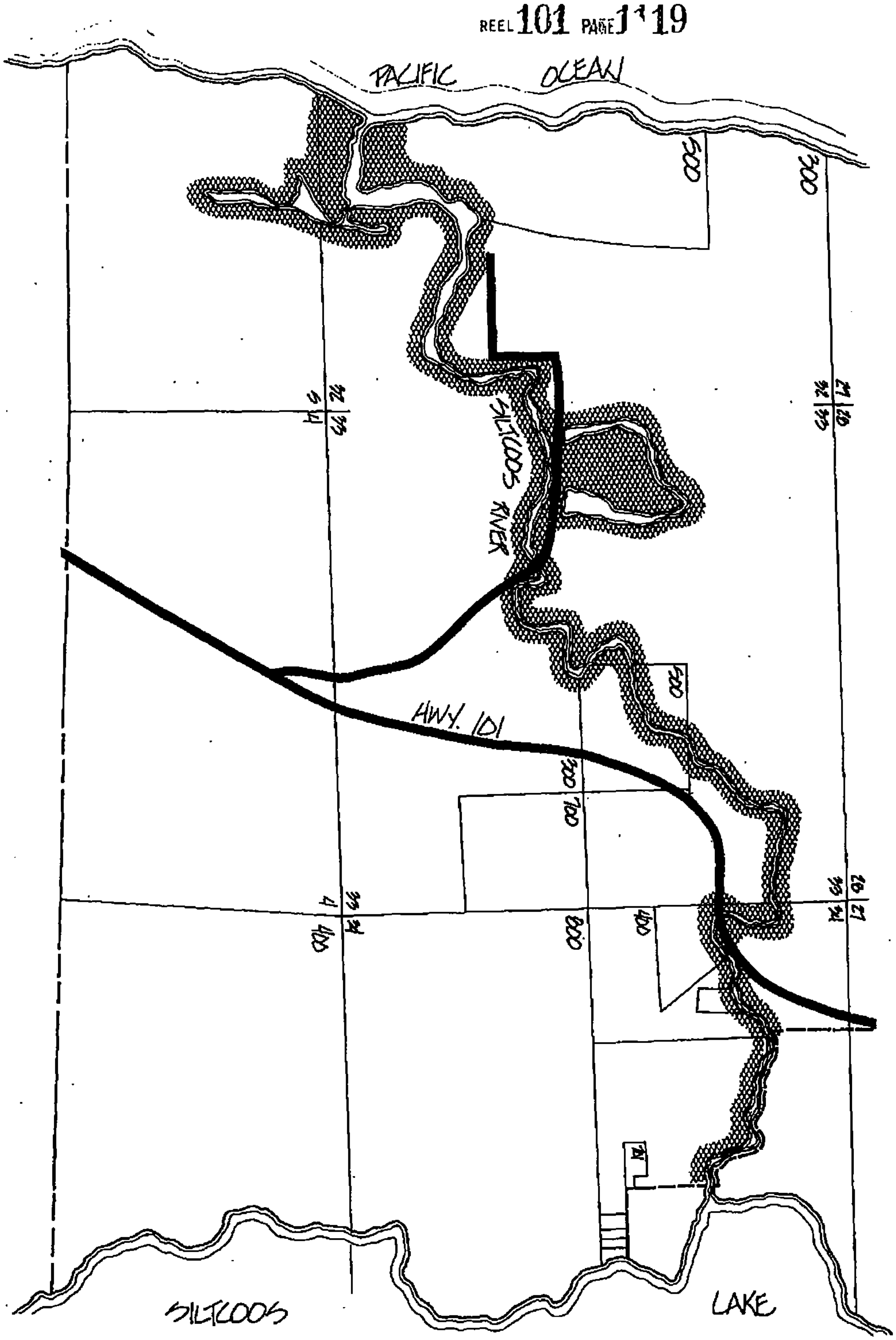
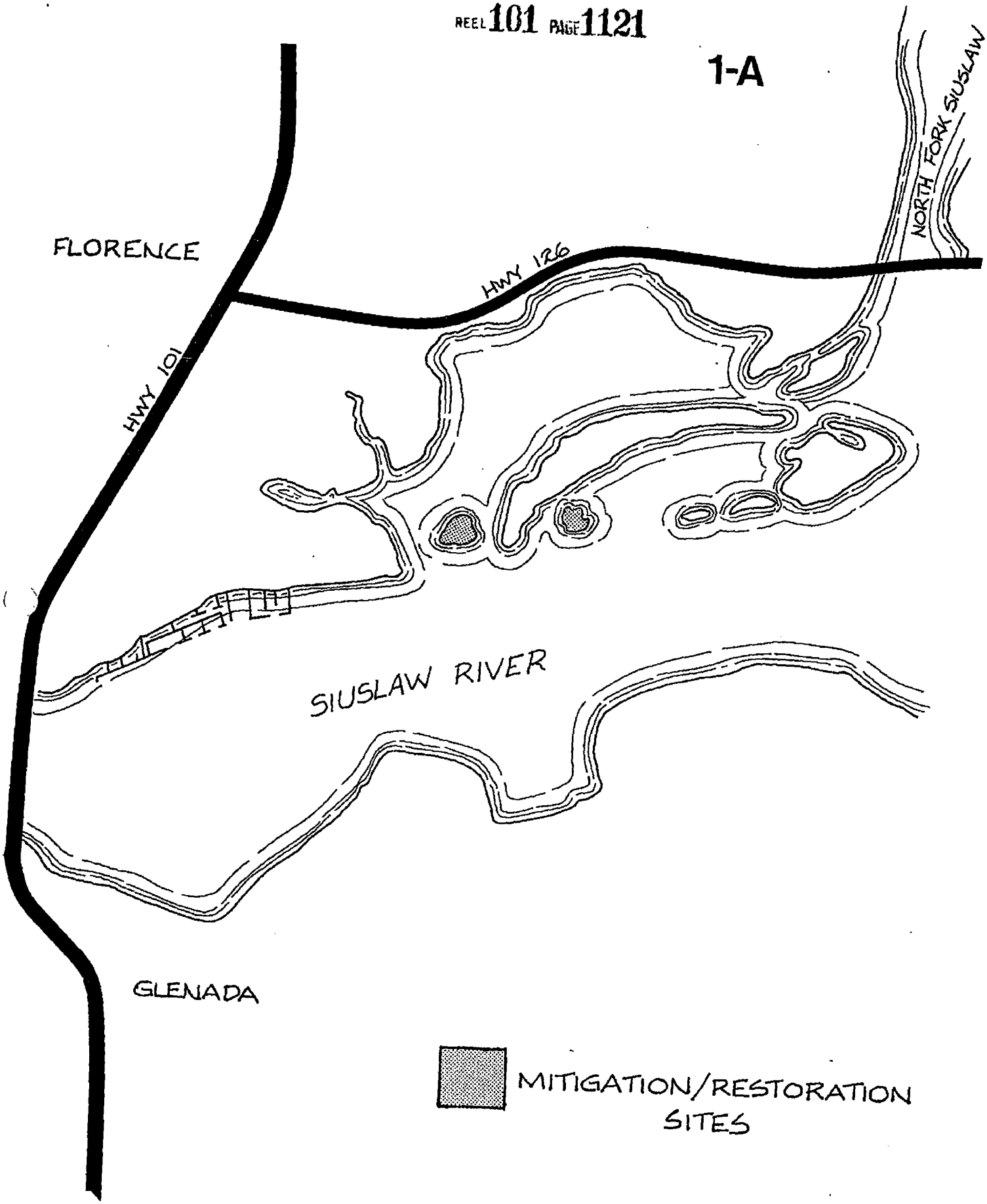
OCEAN
TENMILE
CREEK
TENMILE
CREEK
RD.


PACIFIC
OCEAN
BIG CREEK
BIG CREEK ROAD
22
23
14
13


PACIFIC OCEAN
SILTCOOS RIVER
HWY. 101
SILTCOOS
LAKE

1-A


FLORENCE
HWY 126
HWY 101
NORTH FORK SIUSLAW
SIUSLAW RIVER
GLENADA
MITIGATION/RESTORATION SITES

APPENDIX D
ORD. 823

Addendum to Coastal Goals Compliance Report, May 1980

age 18. West Lane Planning Commission, in retrospect, feels that commercial clamming and fishing within the estuary is improper. Staff agrees with WLPC in that commercial clamming is currently prohibited due to poor water quality and promoting commercial (as opposed to recreational) fishing while encouraging aquaculture is inconsistent. Therefore, the recommendation is to delete policy #3 under Natural. Policy #4 becomes policy #3.

Page 19. Items 1, 2 and three under Conservation should be indented. They are not policies in and of themselves but refer to criteria used in evaluating new or expanded log storage sites.

Page 20. Typographical error under policy 5(1). Should read (1) erosion or.....

Page 21. Add the following sentence to second paragraph:

"These sites are included within Estaurine M.U. 'D' (Natural) and are indicated on map IA. These two small islands consist primarily of high salt marsh, an environment which the Siuslaw estuary has in abundance. Reduction of the surface of these islands would provide additional subtidal or intertidal environments which the estuary is relatively poor in. However it is critical that the overburden removed from these islands not be deposited within M.U. 'D' as it consists throughout of the following highly productive environments:

1. Major clam beds,
2. Major intertidal seagrasses,
3. Subtidal seagrasses,
4. Major intertidal alqae beds, and
5. Major tide flats."

This is to live up to requirement that we designate potential restoration/ mitigation sites.

Page 22. Delete commercial clamming and fishing as a conditional use under Natural. (B,6.) This is for reasons specified above.

Page 25. The boundaries of Natural Management Unit 'E' on the southeastern portion have been modified from those shown on the estuary maps. The amount of estuarine area has been reduced slightly and this has been reflected on the master maps.

Page 26. New paragraph after paragraph 3:

"Two small islands which consist of high saltmarsh and more terrestrial shrubery are designated as mitigation sites. Overburden removed from these islands to create intertidal or subtidal environments here must not be deposited in the remainder of this M.U."

Page 29. Insert page "53" in the blank space in the third paragraph under minor estuaries.

Page 34 and 35 Policy #12 under Prime Wildlife MU and under Significant Natural MU should be made more specific so that they cannot be misconstrued to apply to just any wet grassy area.

Prime Wildlife policy #12 should be expanded to read:

"Freshwater marsh areas are found within Estuarine shorelands MU 21 opposite the east end of Duncan Island, in section 18-11-12, and within Woahnik Lake shorelands MU 2 (19-12-11) and Siltcoos Lake MU 4 (19-11-19-and 30) and MU 5 (19-12-35). Smaller freshwater marsh areas are also found on Siltcoos Lake within MU 5 (19-12-25)."

Significant Natural Area policy #12 should be expanded to read:

"Freshwater marsh areas are found south of Sutton Lake between the two portions (MU 4) and in estuary shoreland's MUs 4 and 27."

Page 60 Based on some objections voiced by Mr. V.M. Howard of Eugene who owns property around Clear and Collard Lakes the following modifications are recommended:

1. Change the Extent wording to read:

   "Extent; 500' from the lake along the entire shore of Clear Lake except on the east where the extent shall be 500' or the ridge line, whichever is less....."

2. In the Discussion section, the word "minimum" modifying stabilization plantings in the 4th sentence should be deleted to make it clear that stabilization of the open dunes to prevent filling of the lakes is encouraged.

Page 69 The "Extent" portions of MUs 3 and 4 are inaccurate and should be modified as follows:

1. For MU 3.

   "Extent: The lands lying west of Highway 101 from the north line of 15-12-27, 1-2801 South to the east-west centerline of 15-12-27.4-200."

2. For MU 4.

   "Extent: The land lying west of Highway 101 from 15-12-27.4-2100 on the south-north to the east-west centerline of 15-12-27.4-200."

age 68 The following six coastal lakes were omitted by Wilsey and Ham in the Lane County Coastal Inventory and subsequently in the Coastal Compliance Report. The following management unit descriptions are proposed for inclusion in the Compliance Report following the description of Siltcoos Lake management units on page 68.

HECETA JUNCTION LAKE (HIDDEN LAKE)

(1) Prime Wildlife Area:

A. Extent: A band 65' in width measured horizontally from the high water line completely surrounding the Lake.

B: Rationale:

1. Dense riparian vegetation with associated wildlife values.

C: Discussion: The riparian zone is inhabited by some 74 wildlife species, provides bank stabilization and helps to preserve water quality. Studies indicate that clearing of riparian vegetation can lead to a loss of fauna diversity within a larger area since wildlife depend on the vegetation for cover. The highly erosive nature of sand dune areas makes maintenance of this vegetation important in preserving water quality.

(2) Natural Resources Preservation:

A. Extent: A band 435' in width measured horizontally from the outer boundary of management unit 1, except on the western portion of the lake where Heceta Junction Road limits the width to less than 435'.

B. Rationale:

1. Recently stabilized dunes and wet interdune areas with associated constraints on vegetation removal and septic systems.

C. Discussion: Vegetation removal on Westport soils may lead to dune reactivation if extensive. Septics in the Yaquina soils may present problems due to the high water table. Extensive development could result in significant loss of water quality.

NORTH JETTY LAKE

(1) Prime Wildlife Area:

A. Extent: A band measured horizontally from the high water line of the Lake 500' in width on the north, west and south shoreland areas but extending to the western boundary of the platted area of 18-12-9 on the east which corresponds to the ridge of a stabilized dune.

B. Rationale:

1. Resting area for waterfowl.

2. Frequent wildlife use including beaver, otter, mink and muskrat.

3. Extensive freshwater bog areas.
4. Tule' bog at north end.
5. Recently stabilized dunes with dense shoreland vegetation.
6. Old Siuslaw River channel.
7. Traditional low intensity recreational use.

C. Discussion: There is currently a contested suit of quiet title filed by the State of Oregon on this property. However, the nature of the surrounding shorelands (wet deflation plain to large extent) renders this land unsuitable for development. The traditional low-intensity recreational use of the area, and the value as wildlife habitat makes this land a valuable natural asset within the Florence Urban Growth Boundary. Trails on the dryer east side of the lake should be provided to permit easier access and opportunities for observation.

BEAR LAKE

(1) Natural Resources Preservation:

A. Extent: A band measured horizontally 500' from the high water shoreline of the lake except on the east side where the management unit abuts Cleawox MU 1.

B. Rationale:

1. Site Class III timber soils (Bullards-Fellero series) on eastern shorelands.
2. Older stabilized dunes, recently stabilized dunes and active dune forms surround the lake, with associated erosion hazards.
3. Within DNRA.

C. Discussion: This relatively isolated lake is surrounded by sand dune forms. The older stabilized dunes to the east grow good timber but the erosive nature of underlying sands place constraints on harvesting methods. The recently stabilized sands on the west are stabilized by European beach grass. Damage to this plant could lead to activation of the dune and filling of the lake.

The majority of the shorelands area is in Federal ownership although portions of three privately owned tax lots on the eastern shore fall within the MU. The DNRA has no plans to develop this lake.

NORTH GEORGIA LAKE (formerly North Erhart Lake)

(1) Prime Wildlife Area:

A. Extent: A band 65' in width, measured horizontally from the high water shoreline of the lake except on the west side where access to the Lake is provided. This is located in 19-12-33 TL 300.

B. Rationale:

1. Inland sector of DNRA.

2. Dense riparian vegetation with associated wildlife values.

3. Osprey nest.

C. Discussion: The DNRA plans a trial from the north bank of the lake to Siltcoos Lake on the east. They plan no more intensive development of the lake and plan to preserve it for wildlife use and passive recreation.

(2) Natural Resources Preservation:

A. Extent: Extending from the outer boundary of management unit 1 in 19-12-33 to a width of 435' measured horizontally except on the western boundary where Highway 101 acts as boundary. In 20-13-4 this management unit extends around Georgia Lake at a width of 435' measured horizontally from the outer boundary of MU 1 of Georgia Lake, except on the western portion the MU shall extend from the shoreline of the Lake on Highway 101.

B. Rationale:

1. Inland sector of DNRA.

2. Site Class II and III timber soils.

3. Older stabilized dunes with associated hazards.

C. Discussion: Although there is good timber growth surrounding the Lake, improper harvesting can lead to erosion problems if the underlying sands are exposed. Iron banding in older stabilized dunes is a septic disposal constraint. The DNRA, however, has no plans to develop this land or harvest timber. Rather they intend that this area be used for passive recreation.

GEORGIA LAKE (formerly Erhart Lake)

(1) Prime Wildlife Area:

A. Extent: A band 65' in width measured horizontally from the high water shoreline of the lake except on the west side where Highway 101 provides easy access to the lake.

B. Rationale:

1. Dense riparian vegetation with associated wildlife use.

2. Inland sector of DNRA.

C. Discussion: The lake gets some use by fishermen during early trout fishing season although stocking rates are low and holdover is unlikely. Although the lake is adjacent to Highway 101 the dense vegetation makes access to all but the west bank extremely difficult except by boat.

(2) Natural Resources Preservation

(See Management Unit 2 under North Georgia Lake for extent and rationale.)

ERHART LAKE (formerly Loon Lake)

(1) Natural Resources Preservation:

A. Extent: An area 500' in width measured horizontally from the high water shoreline of the Lake except on the eastern shorelands where the western boundary of Highway 101 provides an effective boundary.

B. Rationale:

1. Heavy boating, swimming and fishing use.

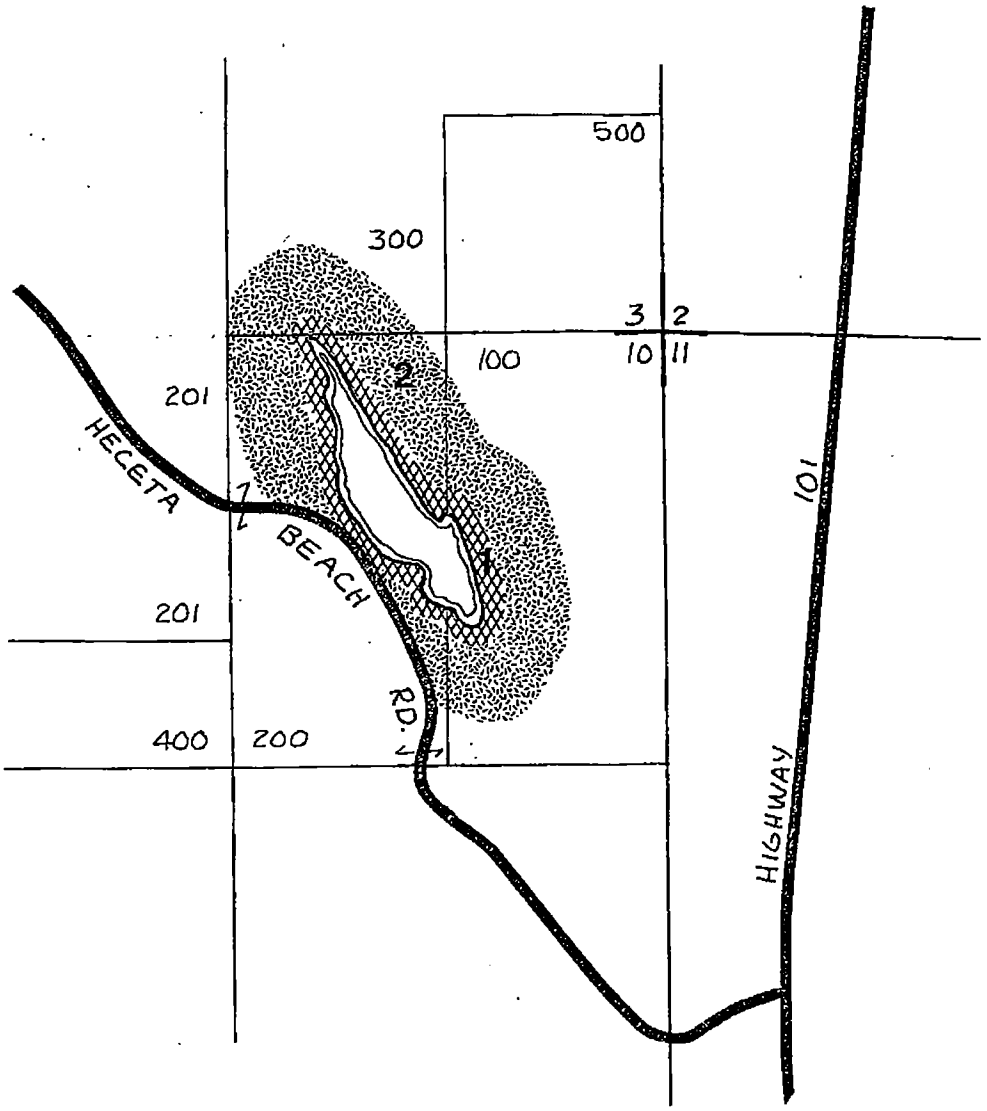
2. Within DNRA.

3. Informal overnight camping.

4. Stabilized dunes with associated hazards given vegetation removal.

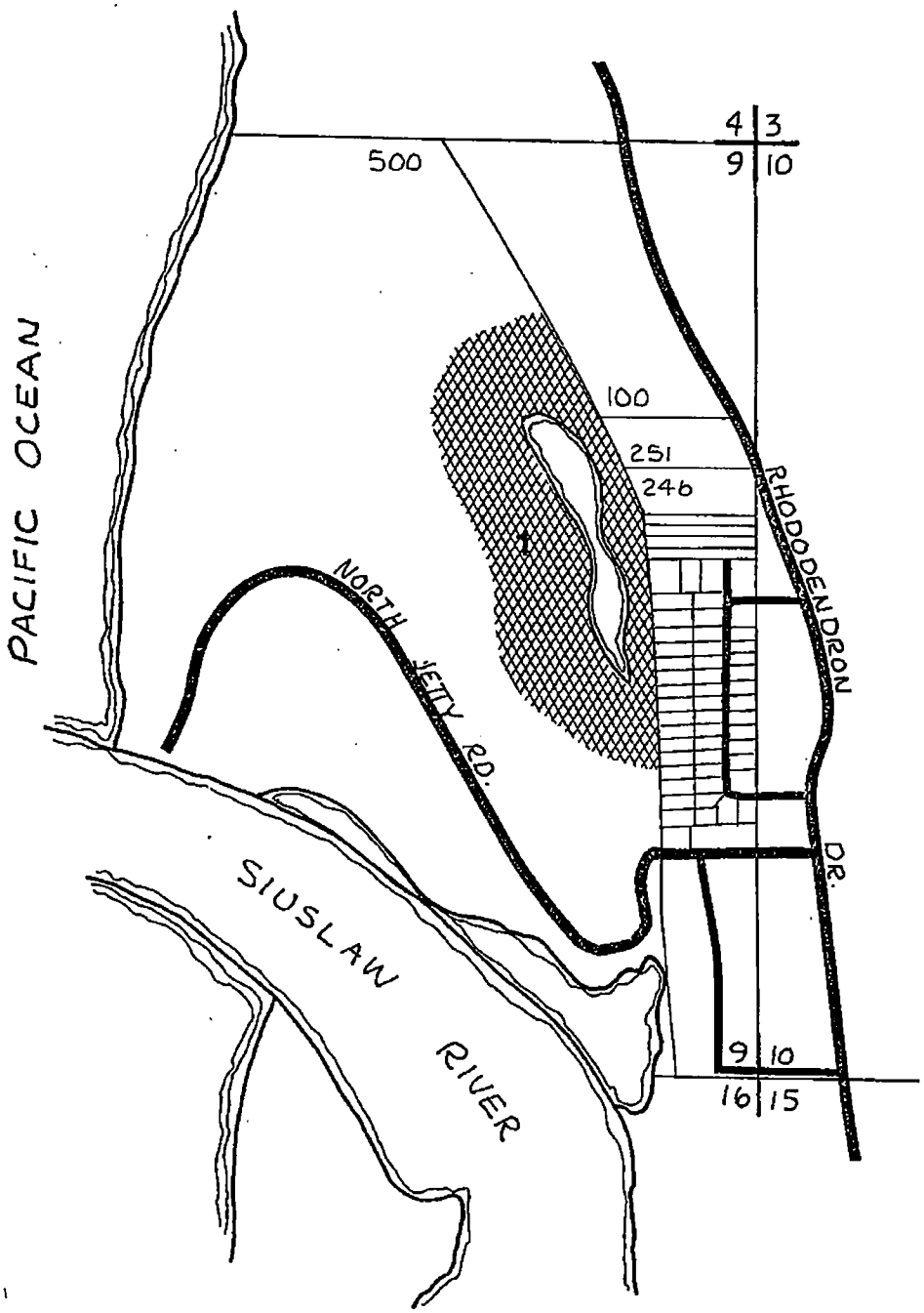
C. Discussion: The DNRA plans to encourage the continued low intensity recreational use of this popular lake. Gas powered boats are inappropriate due to the small size and the heavy swimming and fishing use.

HECETA JUNCTION LAKE



REEL 101 PAGE 1128

NORTH JETTY LAKE



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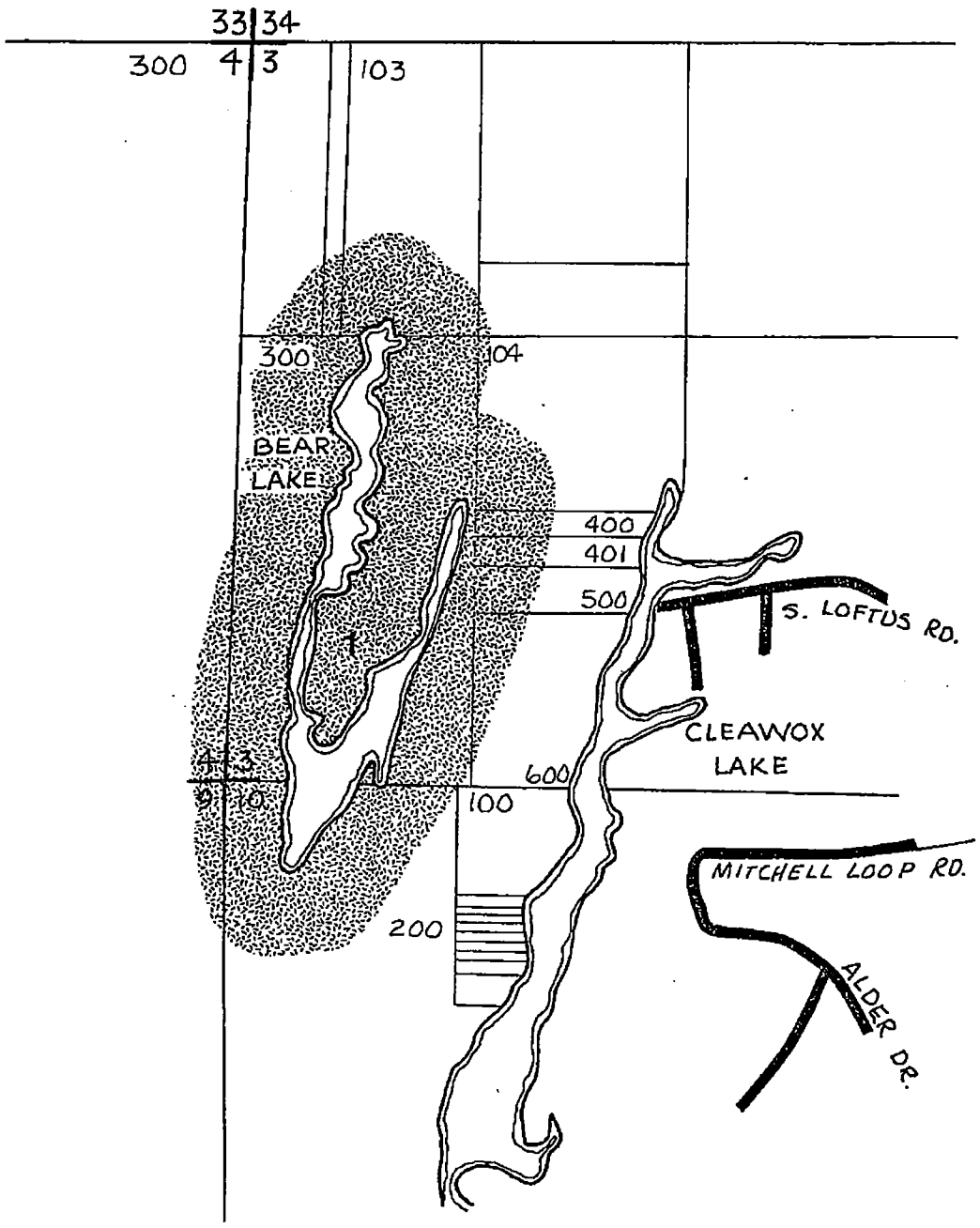
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BEAR LAKE
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401
500
S. LOFTUS RD.
CLEAWOX LAKE
600
100
MITCHELL LOOP RD.
200
ALDER DR.

NORTH GEORGIA LAKE
GEORGIA LAKE
ERHART LAKE