

Puget Trough Coastal Wetlands

FEASIBILITY OF PROTECTION & MANAGEMENT



Report to the Department of Ecology by the
Washington Natural Heritage Program
Department of Natural Resources

Contract No. C0086079

DEPARTMENT OF NATURAL RESOURCES

Brian Boyle
Commissioner of Public Lands

Art Stearns
Supervisor

Mary Jo Lavin, Ph.D.
Deputy Supervisor-
Resource Protection and Services

Division of Private Forestry and Natural Heritage

Arden Olson
Division Manager

Washington Natural Heritage Program

Mark Sheehan
Program Manager

Reid Schuller
Natural Areas Scientist

Rex Crawford
Plant Ecologist

Linda Kunze
Wetland Ecologist

Deborah Naslund
Data Manager

John Gamon
Botanist

Nancy Sprague
Assistant Data Manager

Samira Kauthar
Secretary

PUGET TROUGH COASTAL WETLANDS
Feasibility of Protection and Management

by

Linda M. Kunze
Wetland Ecologist

Christopher Garber
Environmental Intern

Florence Caplow
Environmental Intern

Washington Natural Heritage Program
Department of Natural Resources
Olympia, Washington

Contract No. C0086079 Report to:

Washington Department of Ecology
Olympia, Washington

June, 1986

ABSTRACT

This report was proposed by the Washington State Department of Ecology as a follow-up to Puget Trough Coastal Wetlands: A Summary Report of Biologically Significant Sites (Kunze, 1984). In it recommendations are made on the most feasible method of protection and the most appropriate use for each of the 19 sites listed in the Puget Trough coastal wetlands report. Detailed information on landownership is provided for each parcel, including owner names and addresses, short "legal" descriptions, land use designations, and assessed values. The most feasible method of protection is recommended for each parcel, as well as the overall site. A sequence of landowner contacts is also recommended.

ACKNOWLEDGEMENTS

There are a number of people and agencies that I would like to thank for their assistance in producing this report:

Mark Sheehan for his role as editor;

Reid Schuller for his review of management considerations;

Samira Kauthar for word processing;

Nancy Sprague for doing the final map cleaning;

Washington State Department of Ecology, Shorelands Division personnel for making county SMMP documents available; and

County Planning Department personnel from Clallam, Jefferson, Island, Kitsap, Mason, San Juan, Skagit, Snohomish, and Thurston Counties for applying their time and expertise to sorting out zoning problems.

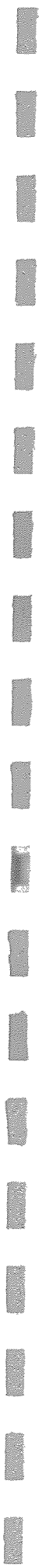


TABLE OF CONTENTS

	Page Number
List of Figures	vii
List of Tables	xi
Introduction	1
Feasibility for Being in Protected Status.	1
Proposed Boundaries.	4
Methods of Protection.	5
Management Considerations.	7
Zoning	7
Appendix I: Site Reports	
American Camp Lagoons.	13
Dungeness Spit	23
Foulweather Bluff Preserve	31
Foulweather Salt Marsh	41
Gull Harbor.	51
Hamma Hamma River Delta.	61
Henry Island	69
Kennedy Creek.	79
Lake Hancock	87
Lynch Cove	97
Nisqually River Delta.	105
Perego's Lagoon.	115
Salt Creek	125
Skagit River Delta	135
Skookum Inlet.	151
Stavis Bay	159
Tarboo Bay	169
Thorndyke Bay.	179
Westcott Bay	189
Glossary	199
Bibliography	205



LIST OF FIGURES

Figure	Page Number
Figure 1. Locations of 19 study sites	3
Figure 2. American Camp Lagoons Location Map.	14
Figure 3. American Camp Lagoons Recommended Boundary.	17
Figure 4. American Camp Lagoons SMMP Zoning	19
Figure 5. American Camp Lagoons County Zoning	21
Figure 6. Dungeness Spit Location Map	24
Figure 7. Dungeness Spit Recommended Boundary	27
Figure 8. Dungeness Spit SMMP Zoning.	29
Figure 9. Foulweather Bluff Preserve Location Map	32
Figure 10. Foulweather Bluff Preserve Recommended Boundary	35
Figure 11. Foulweather Bluff Preserve SMMP Zoning.	37
Figure 12. Foulweather Bluff Preserve County Zoning.	39
Figure 13. Foulweather Salt Marsh Location Map	42
Figure 14. Foulweather Salt Marsh Recommended Boundary	45
Figure 15. Foulweather Salt Marsh SMMP Zoning.	47
Figure 16. Foulweather Salt Marsh County Zoning.	49
Figure 17. Gull Harbor Location Map.	52
Figure 18. Gull Harbor Recommended Boundary.	55
Figure 19. Gull Harbor SMMP Zoning	57
Figure 20. Gull Harbor County Zoning	59
Figure 21. Hamma Hamma River Delta Location Map.	62
Figure 22. Hamma Hamma River Delta Recommended Boundary.	65
Figure 23. Hamma Hamma River Delta SMMP Zoning	67
Figure 24. Henry Island Location Map	70
Figure 25. Henry Island Recommended Boundary	73
Figure 26. Henry Island SMMP Zoning.	75
Figure 27. Henry Island County Zoning.	77
Figure 28. Kennedy Creek Location Map.	80
Figure 29. Kennedy Creek Recommended Boundary.	83
Figure 30. Kennedy Creek SMMP Zoning	85
Figure 31. Lake Hancock Location Map	88
Figure 32. Lake Hancock Recommended Boundary	91
Figure 33. Lake Hancock SMMP Zoning.	93
Figure 34. Lake Hancock County Zoning.	95
Figure 35. Lynch Cove Location Map	98
Figure 36. Lynch Cove Recommended Boundary	101
Figure 37. Lynch Cove SMMP Zoning.	103
Figure 38. Nisqually River Delta Location Map.	106
Figure 39. Nisqually River Delta Recommended Boundary.	109
Figure 40. Nisqually River Delta SMMP Zoning	111
Figure 41. Nisqually River Delta County Zoning	113
Figure 42. Perego's Lagoon Location Map.	116
Figure 43. Perego's Lagoon Recommended Boundary.	119
Figure 44. Perego's Lagoon SMMP Zoning	121
Figure 45. Perego's Lagoon County Zoning	123
Figure 46. Salt Creek Location Map	126
Figure 47. Salt Creek Recommended Boundary	129
Figure 48. Salt Creek SMMP Zoning.	131
Figure 49. Salt Creek County Zoning.	133

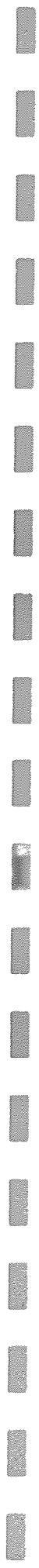


Figure	Page Number
Figure 50. Skagit River Delta Location Map	136
Figure 51a. Skagit River Delta Recommended Boundary	139
Figure 51b. Skagit River Delta Recommended Boundary	141
Figure 52a. Skagit River Delta SMMP Zoning.	143
Figure 52b. Skagit River Delta SMMP Zoning.	145
Figure 53a. Skagit River Delta County Zoning.	147
Figure 53b. Skagit River Delta County Zoning.	149
Figure 54. Skookum Inlet Location Map.	152
Figure 55. Skookum Inlet Recommended Boundary.	155
Figure 56. Skookum Inlet SMMP Zoning	157
Figure 57. Stavis Bay Location Map	160
Figure 58. Stavis Bay Recommended Boundary	163
Figure 59. Stavis Bay SMMP Zoning.	165
Figure 60. Stavis Bay County Zoning.	167
Figure 61. Tarboo Bay Location Map	170
Figure 62. Tarboo Bay Recommended Boundary	173
Figure 63. Tarboo Bay SMMP Zoning.	175
Figure 64. Tarboo Bay County Zoning.	177
Figure 65. Thorndyke Bay Location Map.	180
Figure 66. Thorndyke Bay Recommended Boundry	183
Figure 67. Thorndyke Bay SMMP Zoning	185
Figure 68. Thorndyke Bay County Zoning	187
Figure 69. Westcott Bay Location Map	190
Figure 70. Westcott Bay Recommended Boundary	193
Figure 71. Westcott Bay SMMP Zoning.	195
Figure 72. Westcott Bay County Ownersip.	197



LIST OF TABLES

Table	Page Number
Table 1. Feasibility of Protection and Recommended Methods: Summary Table.	9



INTRODUCTION:

With European settlement of the Pacific Northwest came tremendous pressure to develop the estuaries within the Puget Trough. Coastal wetlands were, and still are, prime locations for port, industrial, agricultural, and urban development. Because of the lack of data giving the historical extent of coastal salt marshes, the exact percentage of presettlement marshes which still exist is unknown, but it is substantially less than 50% and probably on the order of 20%.

Although the rate of conversion of wetlands has been reduced in recent years, there continue to be pressures to develop these areas. In 1983, the Washington State Department of Ecology contracted with the Washington State Department of Natural Resources, Natural Heritage Program to assess the status of coastal wetlands within the Puget Trough. The study was also to identify appropriate candidates for inclusion within a statewide system of estuarine sanctuaries. This study, completed in 1984, recommended 19 sites for inclusion within a state sanctuary program (Kunze, 1984).

The Puget Trough Coastal Wetlands report's summary expressed the need for protection of these valuable wetlands:

"...we are fortunate in having coastal wetlands that still resemble the native systems... Through a coastwide system of sanctuaries, we have the opportunity to protect these fragile, diminished systems and to provide research and educational opportunities. This in turn may lead to a greater understanding of their importance and a fuller appreciation of their value."

In late 1985, the Department of Ecology took the next step in determining the possibility of developing a statewide sanctuary system. The Department of Ecology contracted with the Department of Natural Resources, Natural Heritage Program to conduct a feasibility study for the 19 sites listed in the Puget Trough Coastal Wetlands report (figure 1). The following report evaluates the 19 sites for the feasibility of each to be placed in protected status. It also makes recommendations on protection boundaries, the most appropriate kind of protection, and management considerations.

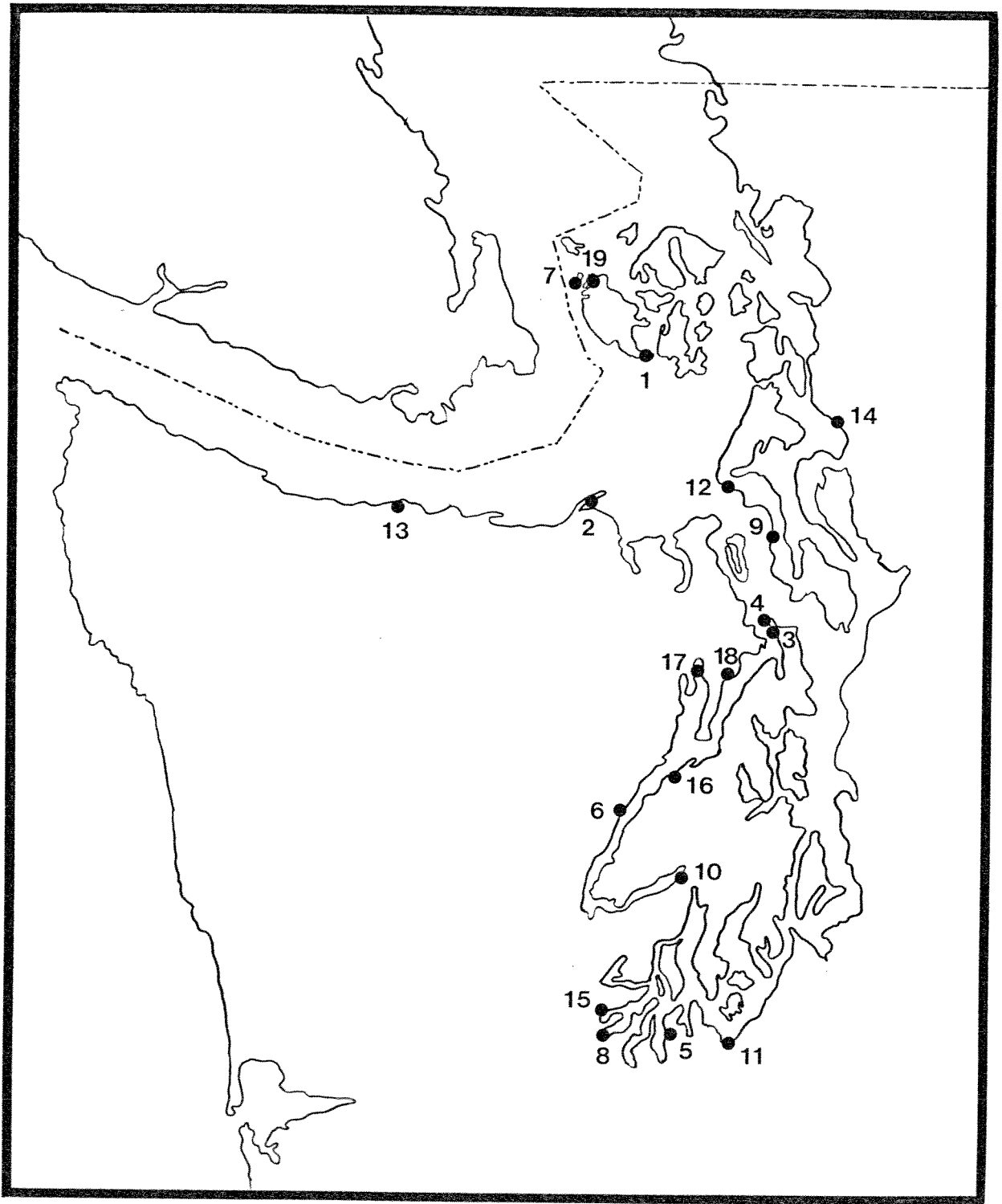
FEASIBILITY FOR BEING IN PROTECTED STATUS:

The feasibility or potential for protecting a site takes into account:

1. the ability to protect the values for which the site was identified,
2. the receptivity of the landowner(s) to the idea of protecting their property,
3. land prices, and
4. patterns and history of use.

Figure 1: Location of 19 Report Sites

1. American Camp Lagoons
2. Dungeness Spit
3. Foulweather Bluff Preserve
4. Foulweather Salt Marsh
5. Gull Harbor
6. Hamma Hamma River Delta
7. Henry Island
8. Kennedy Creek
9. Lake Hancock
10. Lynch Cove
11. Nisqually River Delta
12. Perego's Lagoon
13. Salt Creek
14. Skagit River Delta
15. Skookum Inlet
16. Stavis Bay
17. Tarboo Bay
18. Thorndyke Bay
19. Westcott Bay



The ability to protect the values for which a site was identified depends on protecting the physical and biological components and processes of the site. Can a boundary be drawn which adequately protects the site? This question takes into consideration current and projected adjacent land uses and their possible effects on the site. It considers current and potential water quality and flow problems, and whether they can be avoided or resolved. It also considers the importance of natural processes such as siltation and erosion and the potential for these processes to be altered to the detriment of the site elements. The proposed boundaries drawn for each site (Appendix I) are the minimum boundaries necessary to provide adequate protection while taking into consideration ownership boundaries.

It is essential that the landowner(s) be willing to provide some kind of protection for their land. No protection is possible without landowner cooperation.

The method of protection which a landowner is willing to consider also affects the feasibility of protecting a site. In some cases, registration (page 5) provides adequate protection for a site. In other cases registration is not adequate and either a conservation easement (page 6) or acquisition (page 6) are necessary. The recommended method of protection is that which is most feasible yet which still provides an adequate level of protection.

The price of the land or a conservation easement is important if it is extremely high. If the fair market value of a parcel is high or if the site is very large, acquiring the site may not be feasible.

Some kinds of destructive uses are very hard to manage or eliminate. In some cases, these uses are so firmly established that their elimination is impossible or extremely expensive. In these cases, protection of the site may not be feasible.

In Table 1, the feasibility of protecting a site is ranked from 1 to 3, with 1 being a high degree of feasibility and 3 being a low degree.

PROPOSED BOUNDARIES:

For each site, a map has been drawn indicating the minimum recommended protection boundary. In most cases, the base maps are quarter township orthophoto maps. Where good orthophoto maps were not available, U.S.G.S. 7.5 minute quadrangle maps were used.

The recommended boundaries are the melding of the minimum adequate biological boundaries and ownership boundaries.

The biological boundaries are the minimum boundaries necessary to protect the elements for which the site was identified. They take into consideration things such as drainage patterns, water quality, accretion and erosion features and processes, needs for buffers, adjacent land use and development, microclimatic conditions, and habitat needs of associated wildlife.

Consideration of ownership boundaries means following ownership lines as much as possible, avoiding either excluding or including small fragments of parcels, and trying to avoid areas with confused ownership. It also considers what is known of individual owner attitudes towards this kind of protection effort. If it is known that a landowner is opposed to this work, an attempt has been made to eliminate their lands from the proposed boundary. If the parcel is critical to protection of the site, it is included regardless of owner attitude, but inclusion will be reflected in a low feasibility rating for protection of the site.

METHODS OF PROTECTION:

There are a number of ways in which lands can be protected. The three which are considered in this report are: registration, conservation easement, and acquisition.

Registration:

Registration recognizes voluntary protection of important elements (as defined in the Natural Heritage Plan) by landowners. The Department of Natural Resources (DNR) adopted regulations guiding this registration effort in 1983 (332-60 WAC).

Once the Natural Heritage Program identifies a possible site for registration, the owner of the land is notified. Landowners receive information on the elements present and about the Registry Program. Written permission to nominate the site for registration is requested. Upon receipt of the owner's written permission, the site is formally nominated to the Natural Heritage Advisory Council. If the Council approves the site, the DNR invites the landowner to register the site. No area is registered without the voluntary consent of the landowner. Continued landowner participation in the Registry Program is voluntary.

Upon registration of an area, the landowner is awarded a Certificate of Registration. The landowner's cooperation may be publicized, but only if the landowner so desires. Registration provides no rights of public access and directions to a site are not published. Management of a registered site is the responsibility of the landowner, although the owner may voluntarily develop a management agreement with DNR.

Certain public lands, especially those protected by legal or administrative designation (e.g., Research Natural Areas) are important potential components of the statewide Natural Area System and can be registered under the provisions of 79.70 RCW and 332-60 WAC (see the Natural Heritage Plan).

Upon written request to the DNR, a landowner may remove his or her land from the Register. The DNR may, with the approval of the Council, remove a site from the Register if it is no longer managed for the elements present.

The Washington Register of Natural Areas Program is currently being managed through a cooperative effort of the DNR, Washington Department of Game (WDG) and The Nature Conservancy (TNC). Working with sites

recommended by the Washington Natural Heritage Program and the WDG's Nongame Program, TNC contacts landowners to provide information, establish communication, and seek voluntary protection through site registration.

By informing landowners of the statewide significance of their land, the Registry Program reduces the chance that elements on these lands might be inadvertently destroyed. This method of protection quickly reaches owners of important sites at a minimal cost to the state. Because the owner has no legal obligation to protect the outstanding natural elements, protection through registration relies heavily on maintaining cooperative relationships and regular communication with landowners.

Conservation Easements:

A landowner, along with owning the land, owns a collection of rights pertaining to that land. Those rights can be given away or sold, just as the land can be. Transferring ownership of those rights is done through easements. Road easements, utility rights, mineral rights and conservation easements are examples of easements.

A conservation easement ensures that specific kinds of use or development will not occur. For instance, it can prohibit logging, subdivision, herbicide and pesticide use, or hunting. It becomes part of the property deed and ensures that the specified use or development will not occur, regardless of land ownership. Conservation easements provide a greater degree of protection than does registration.

A conservation easement normally does not grant the easement owner the right to use the property and it does not open the land to public use. The easement owner does have the right to check on landowner compliance with the easement.

A conservation easement is entered into voluntarily. Either the property owner or perspective easement owner may initiate negotiations for a conservation easement, but both parties must agree before rights can be conveyed.

A landowner who wishes to convey a conservation easement can either donate the easement or sell it to a qualified organization or public agency. In doing so, the assessed value of the land, property taxes, and highest and best use designation may be changed. If the easement is donated, the landowner may be able to take a federal income tax deduction.

Acquisition:

Acquisition is transfer of property ownership. Lands recommended for acquisition in this report should be acquired from willing owners by gift, devise, purchase, grant, dedication, or means other than eminent domain. Lands can be purchased at or below fair market value.

MANAGEMENT CONSIDERATIONS:

A list of management considerations is provided for each site. These considerations are specific to each site, though there are some which appear in most of the site lists.

The aim of the management considerations is to maintain or restore the natural characteristics of the given site. Wetland systems are complex. The species and physical environment are intricately interrelated, having co-evolved over a long period of time. The management considerations are intended to protect the physical systems and their processes as well as the plant and animal species and their communities.

There are limits to the amounts and kind of protection which can be provided. Most of the management considerations are limited to the particular site, seldom extending beyond the recommended site boundaries. The one exception to this rule is monitoring of water quality and flow into a site. These values can have an effect on the site quality and function, but also can be monitored and regulated through existing laws and ordinances.

The combination of the recommended ownership and method of protection is a large factor in determining the suitable kinds and degree of recommended management. In the cases of registration and conservation easements, management is limited to that kind and degree to which the particular owner is willing to agree. In the case of acquisition, management is limited to that which is physically, politically, and economically feasible. In all cases, the recommended management considerations are, at the least, the minimum necessary to maintain the elements for which the site was identified.

Management considerations are also tied to the sensitivity of the site and the proposed use of the site: Will the site receive use by a large number of people (public access) or only research use? How do the elements respond to trampling?

Some of the commonly listed concerns involve: Road building and development within the recommended boundaries, removal or cutting of native vegetation, use of biocides (insecticides and herbicides) within the boundaries, and topographic and hydrologic alterations.

Some of the less commonly listed considerations are: Grazing, recreational use, and control of exotic species.

ZONING:

Maps and information are provided on the Shoreline Management Master Program (SMMP) zoning (state coastal zoning) and the county's zoning. Zoning maps are drawn on enlarged U.S.G.S. 7.5 minute quadrangle maps.

SMMP zoning has been done for each of the counties involved in this study. The definitions of each of the land use designations used in the SMMP are provided in the glossary. These definitions are taken from the Shoreline Management Act (173-16-040 WAC). The SMMP zoning information

was gathered from the county planners and checked against the plans and amendments approved and on file with the Washington Department of Ecology.

County zoning is available for all but Mason County. When possible, copies were obtained of the county zoning maps and ordinances. Otherwise, information was obtained through visits and calls to the county planning offices.

The county land use designation definitions vary from county to county. The pertinent definitions from each county for each site are provided in the site reports. These are not referenced, but in each case, material in quotations comes from the particular county's ordinance.

TABLE 1: Feasibility of Protection and Recommended Methods

Summary Table

SITE	FEASIBILITY*	RECOMMENDED METHOD OF PROTECTION
American Camp Lagoons	1	Acquisition and Registration
Dungeness Spit	1	Registration
Foulweather Bluff Preserve	2	Acquisition and Registration
Foulweather Salt Marsh	2	Conservation Easements
Gull Harbor	2 - 3	Registration and Conservation Easements
Hamma Hamma River Delta	2 - 3	Acquisition
Henry Island	2	Acquisition
Kennedy Creek	2	Acquisition
Lake Hancock	1	Registration and Conservation Easements
Lynch Cove	3	Acquisition
Nisqually River Delta	1	Acquisition and Registration
Perego's Lagoon	1	Acquisition and Registration
Salt Creek	2 - 3	Acquisition or Conservation Easements
Skagit River Delta	2 - 3	Acquisition and Registration
Skookum Inlet	1	Acquisition
Stavis Bay	3	Acquisition or Conservation Easements
Tarboo Bay	1	Acquisition and Conservation Easements

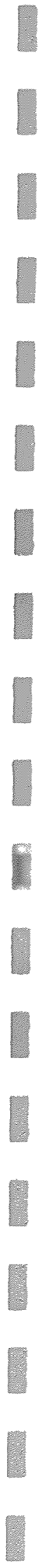
Thorndyke Bay	1 - 2	Acquisition
Westcott Bay	2	Registration or Conservation Easements

* 1 - means that the recommended method(s) of protection is quite feasible.

2 - means that there is some known or anticipated difficulty in providing the recommended level of protection, but given enough time and effort, protection can be obtained.

3 - means that there are major difficulties in obtaining the recommended level of protection; this makes protection unlikely.

APPENDIX
Site Reports



AMERICAN CAMP
LAGOONS

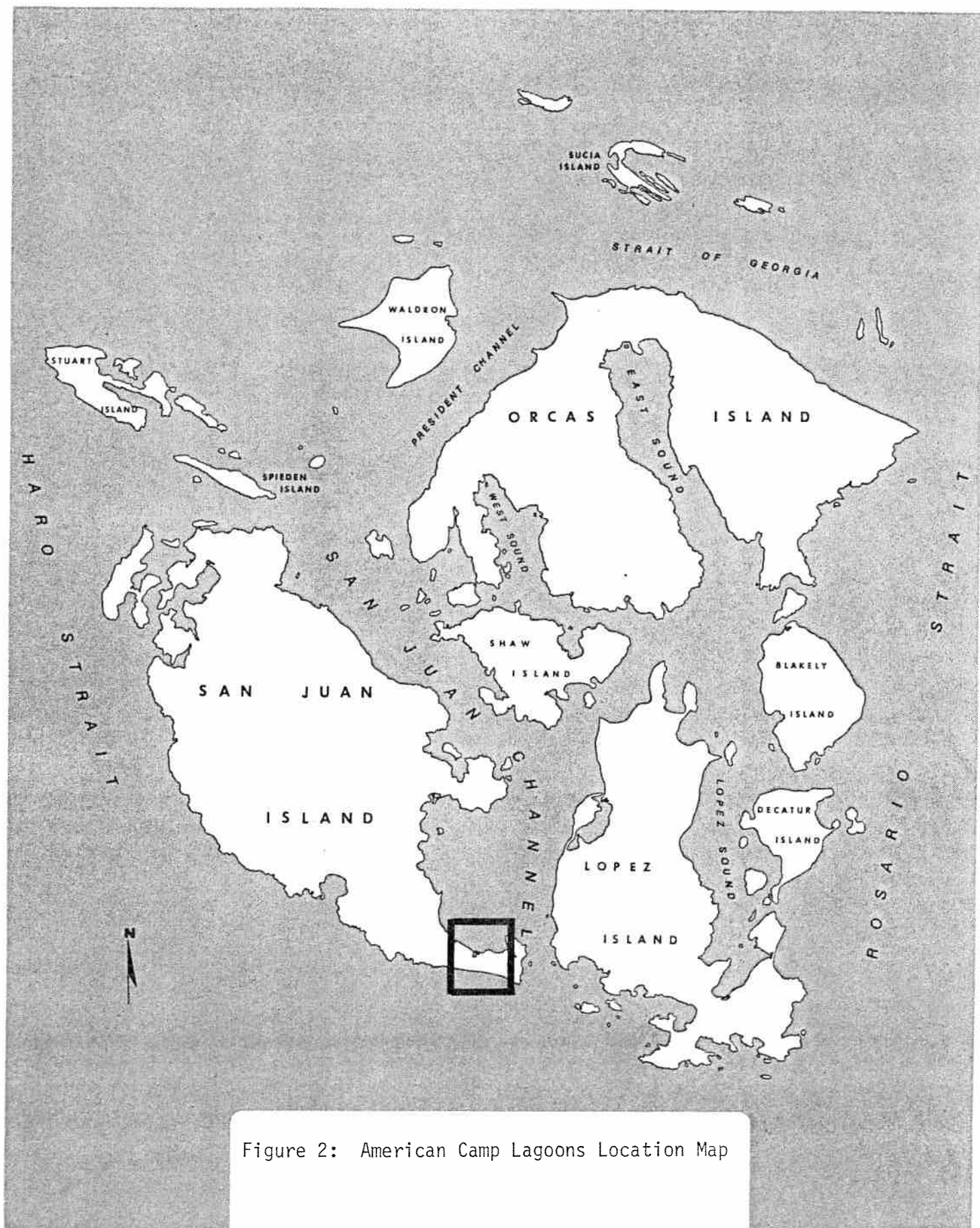


Figure 2: American Camp Lagoons Location Map

AMERICAN CAMP LAGOONS

LOCATION:

San Juan County; T34N, R2W, portions of sections 7 and 8. The proposed area consists of the central (Jakle's) and easternmost ("Third") lagoons in a series of three coastal lagoons located at the south end of Griffin Bay, San Juan Island (figure 2).

SIZE:

The proposed site is approximately 66 acres.

PROPOSED BOUNDARY:

Separate proposed boundaries are drawn around Jakle's Lagoon and Third Lagoon. In each case, the proposed boundary includes the lagoon, the berm, and about a 200 foot upland buffer (figure 3). The southern boundary of each is formed by existing fire control roads.

The proposed boundaries provide minimum buffers around each of the two lagoons. The minimum buffers are recommended with the expectation that the National Historic Park lands, which comprise most of the area, will be managed for their natural values.

If the two drainages involved are proposed for logging or any kind of development, this boundary should be reconsidered. The boundary should then be redrawn to follow the ridge lines south of the lagoons. This would produce a single boundary which would include both lagoons.

The proposed boundaries help protect the freshwater drainage into the lagoons (water quality and flow). It also helps protect the climatic influence that the surrounding vegetation has on the lagoons. The large trees on the basin slopes shade the lagoons, probably reducing water temperatures and evaporation.

The proposed boundary would provide a physical and visual buffer between Third Lagoon and development to the east.

METHOD OF PROTECTION:

The federally owned portion of the proposed site is recommended for registration on the Washington Register of Natural Areas (see page 5). A conservation easement or acquisition is recommended for the privately owned parcel.

MANAGEMENT CONSIDERATIONS:

- 1) New roads should not be built within the proposed boundaries. Existing roads should remain open to the public, but only for hiking.

- 2) Development or improvements should not be allowed within the site boundary.
- 3) Logging should not be allowed within the boundary.
- 4) Biocides and fertilizers should not be used within the site boundary and preferably not within the two drainages.
- 5) Elements at the site should be monitored to assess any type of change or to identify human caused degradation. If the elements are being degraded, steps should be taken to protect them. Generally, natural processes should be allowed to take place.

ZONING:

The Shoreline Management Master Program lists the lagoons as **Natural**, and the surrounding lands as **Conservancy** and **Suburban** (see glossary) (figure 4).

The San Juan County Comprehensive Plan shows the portion of the proposed site in section 7 as **Conservancy** and that in section 8 as **Suburban** (figure 5).

In the San Juan County Comprehensive Plan, **Conservancy** designation is given to "... areas which possess a specific resource or value which can be protected without excluding all other uses. It should be applied to those areas which would be most desirable if their existing character were maintained, but which are also able to tolerate limited or carefully planned development or resource use." Its purpose is to: "protect, conserve and manage existing natural resources and/or valuable historic, educational or scientific research areas without precluding compatible human uses".

The **Suburban** designation is applied to areas which are "...capable of accomodating considerable medium density residential development but which is not suitable or desirable for a more restrictive designation." The purpose of this designation is to "protect and enhance existing medium density residential areas, to provide for additional areas of this type and to provide for non-residential uses which are or can be made compatible with residential areas, in a manner which will protect natural resources."

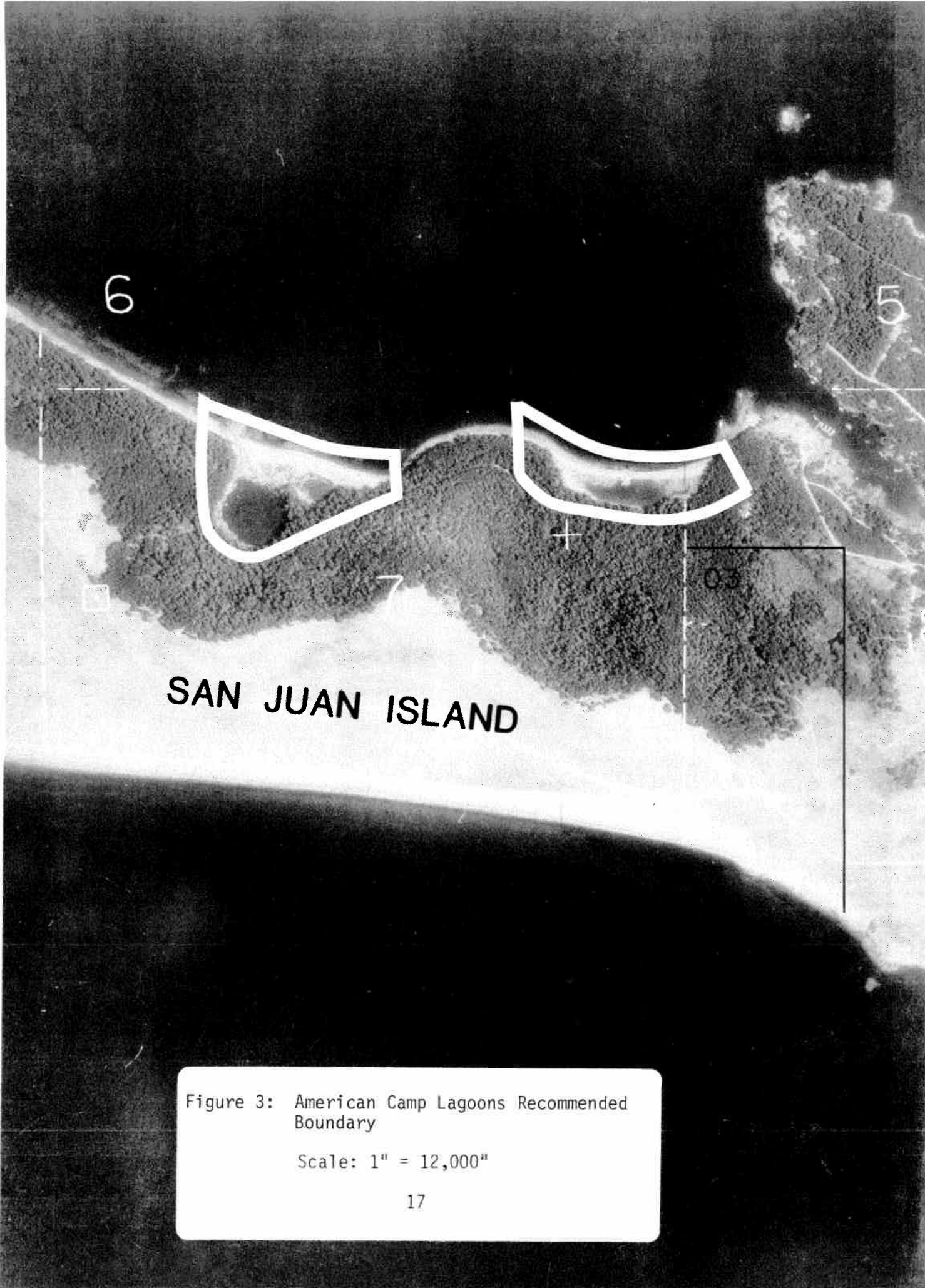


Figure 3: American Camp Lagoons Recommended Boundary
Scale: 1" = 12,000"

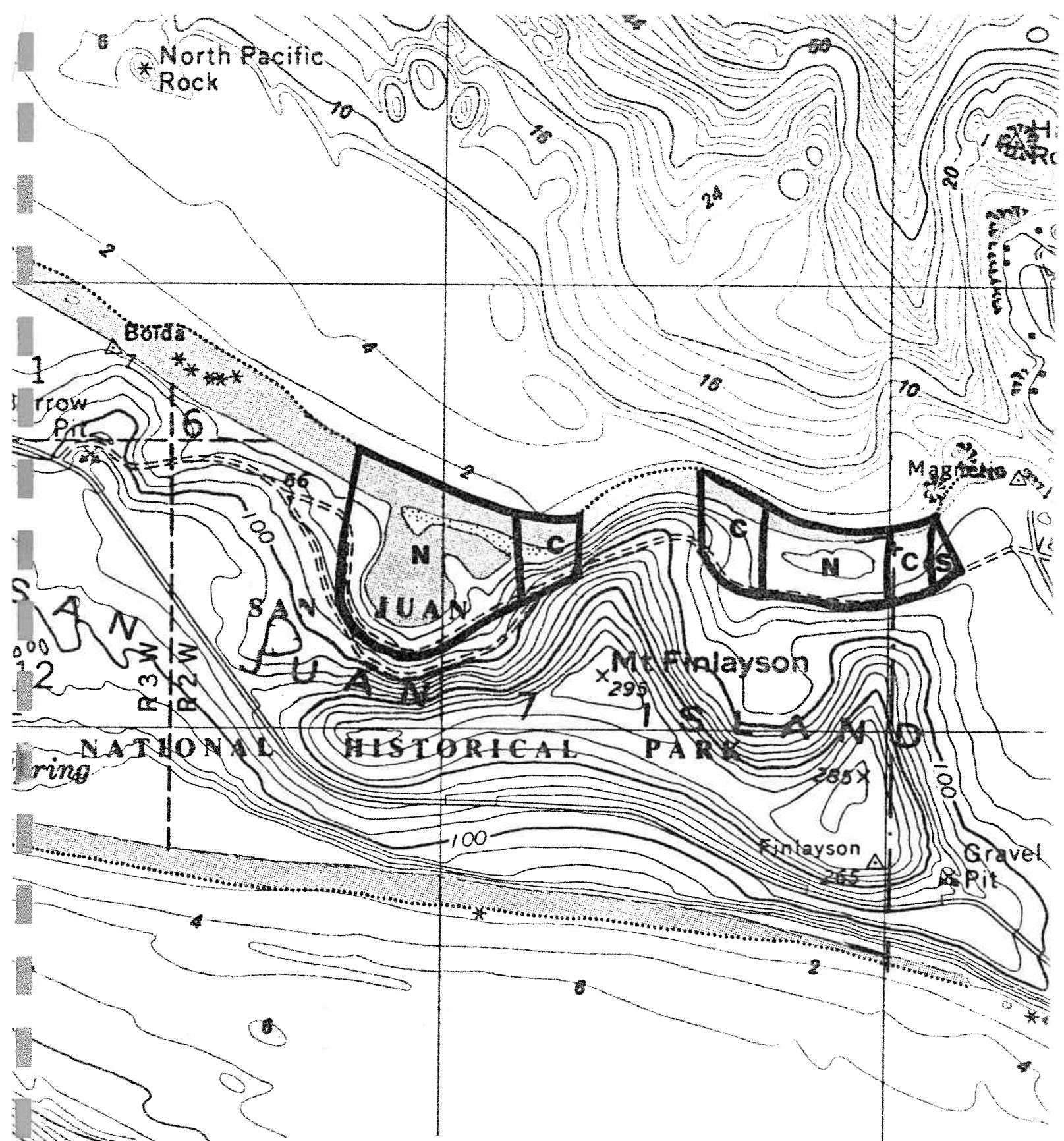


Figure 4: American Camp Lagoons SMMP Zoning
 N=Natural, C=Conservancy,
 S=Suburban

passage

inner



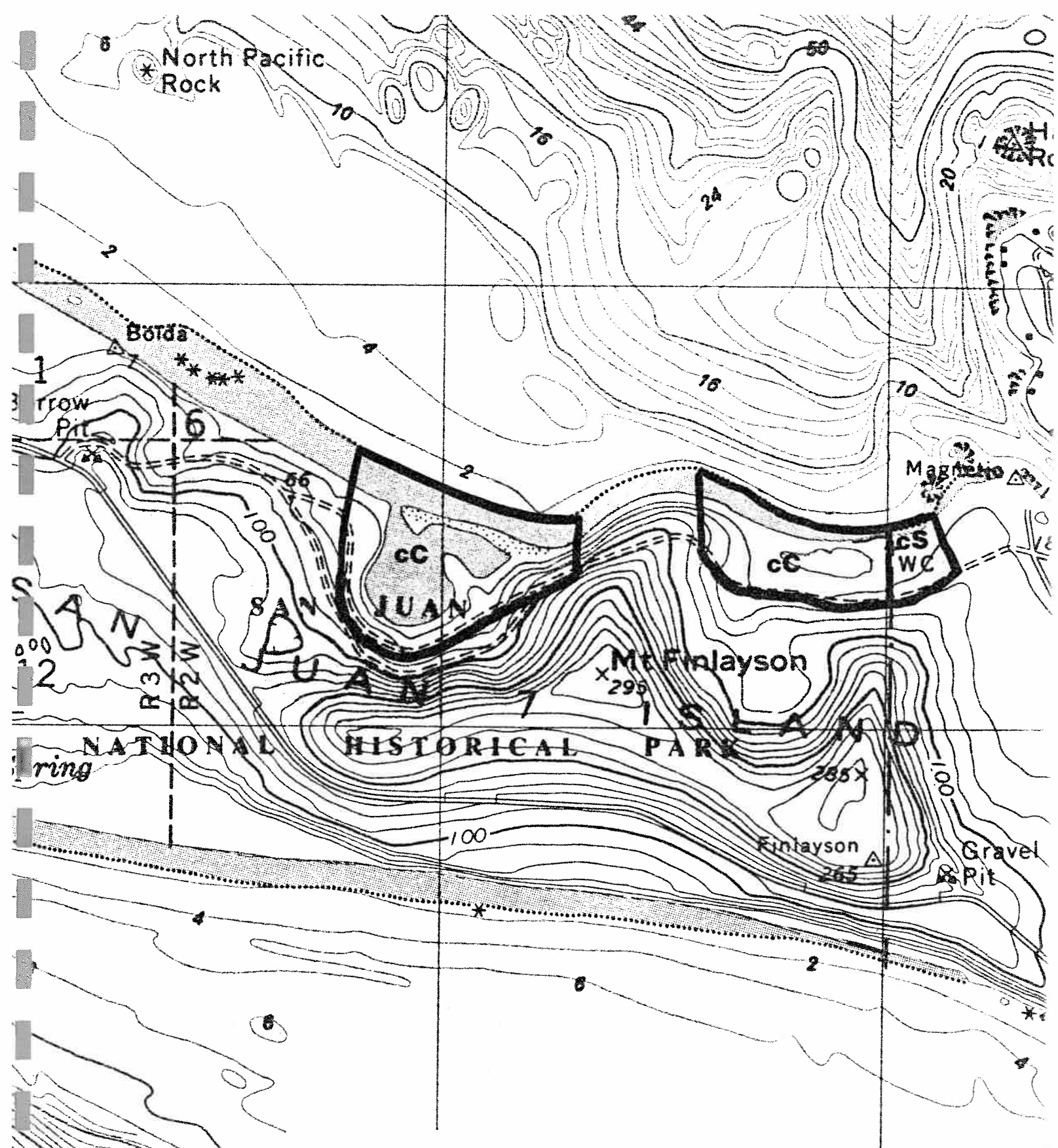


Figure 5: American Camp Lagoons County Zoning
 C=Conservancy, S=Suburban



DUNGENESS SPIT

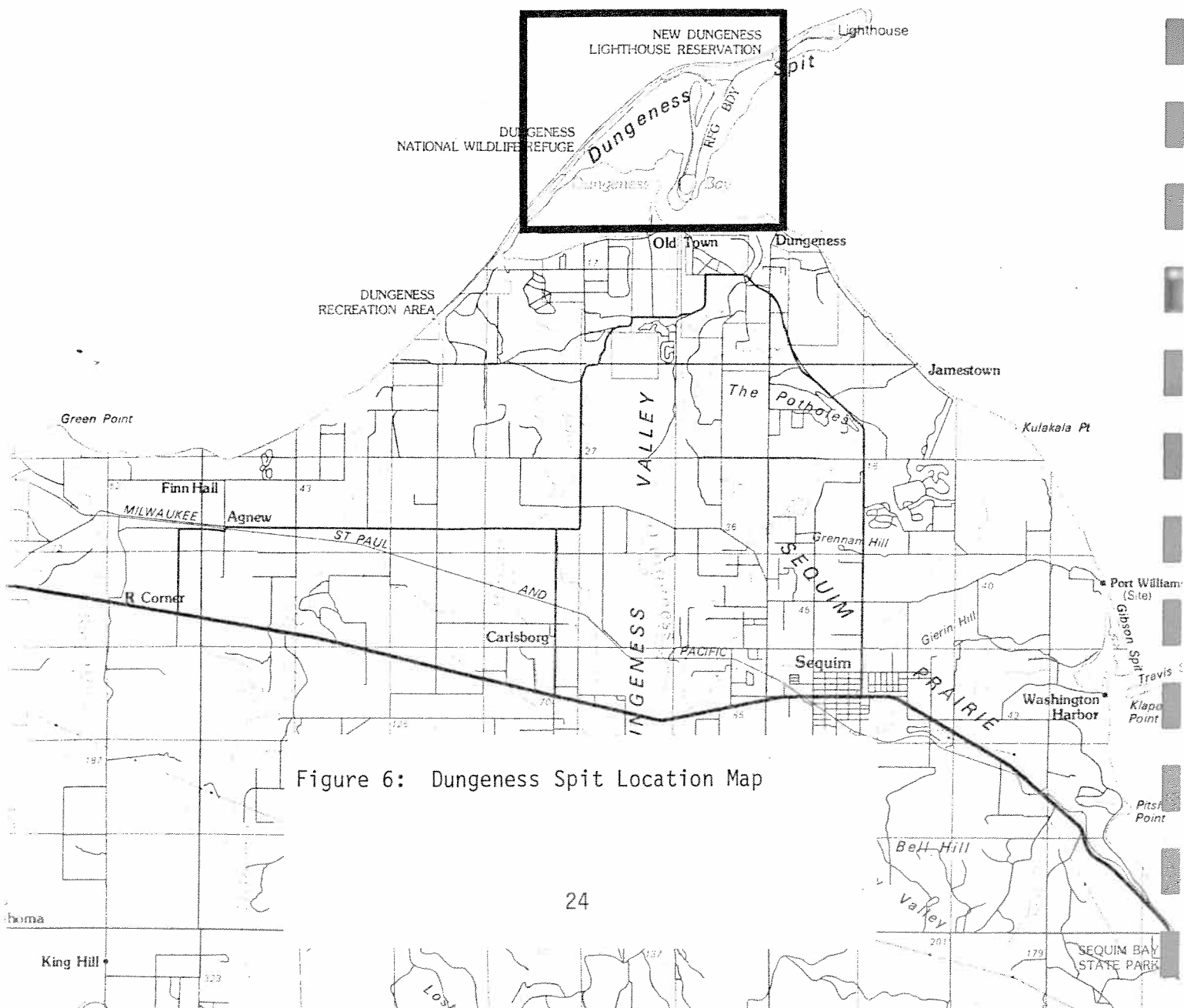


Figure 6: Dungeness Spit Location Map

DUNGENESS SPIT

LOCATION:

Clallam County; T31N, R3W, portions of section 18, and T31N, R4W, portions of sections 13, 14, 22, 23, 24, 25, 26, and 27. The proposed area is leeward of Dungeness Spit, and includes Graveyard Spit and a portion of Dungeness Bay (figure 6).

SIZE:

The proposed site is approximately 630 acres.

PROPOSED BOUNDARY:

The proposed boundary includes that portion of Dungeness Spit National Wildlife Refuge known as Graveyard Spit, and most of the tidelands which lie between Graveyard Spit and Dungeness Spit (figure 7).

The proposed boundary excludes Dungeness Spit proper. Where Graveyard Spit joins Dungeness Spit, the proposed boundary lies south of the road bed. This provides protection for Graveyard Spit, but does not interfere with recreational use of Dungeness Spit or access to the lighthouse.

METHOD OF PROTECTION:

The proposed site lies within U.S. Fish and Wildlife Service and Washington Department of Natural Resources ownership and is recommended for registration on the Washington Register of Natural Areas (see page 5).

MANAGEMENT CONSIDERATIONS:

- 1) Camping and fires on Graveyard Spit should continue to be prohibited.
- 2) Motorized and non-motorized vehicles should not be allowed on Graveyard Spit.
- 3) Domesticated animals should be prohibited on Graveyard Spit (dogs, horses, etc.).
- 4) Biocide use should not be allowed within the proposed boundary.
- 5) Topographic alteration (dredging, diking, filling or soil movement) should not be allowed within the proposed boundary.

- 6) Natural processes should be allowed to take place.
- 7) Exotic species should be kept from spreading, and, if feasible, should be eradicated.

ZONING:

The Shoreline Management Master Program designation for the proposed area is Natural (see glossary) (figure 8).

The area is excluded from Clallam County's Comprehensive Plan.

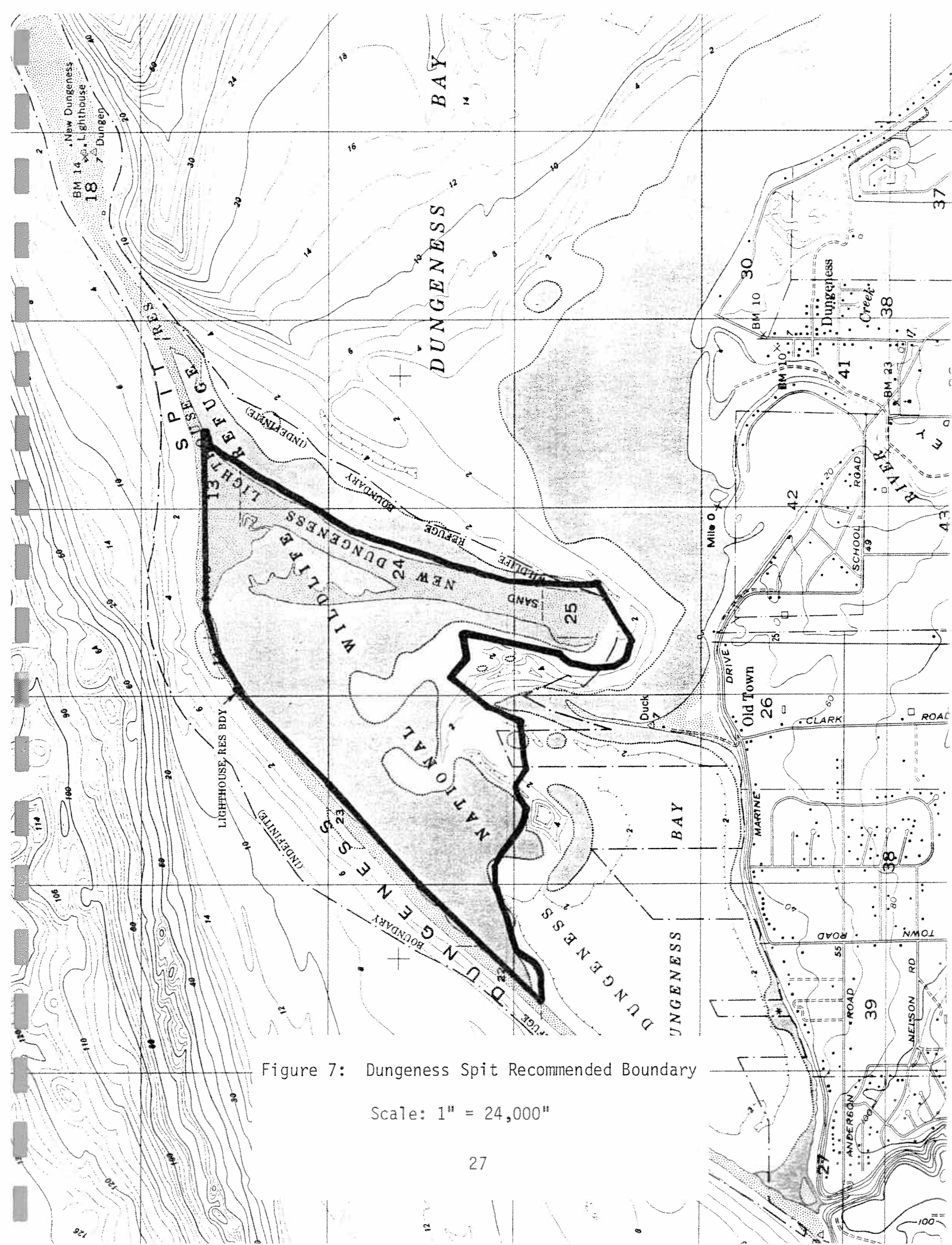
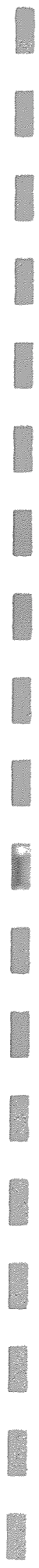


Figure 7: Dungeness Spit Recommended Boundary

Scale: 1" = 24,000"





FOULWEATHER BLUFF PRESERVE

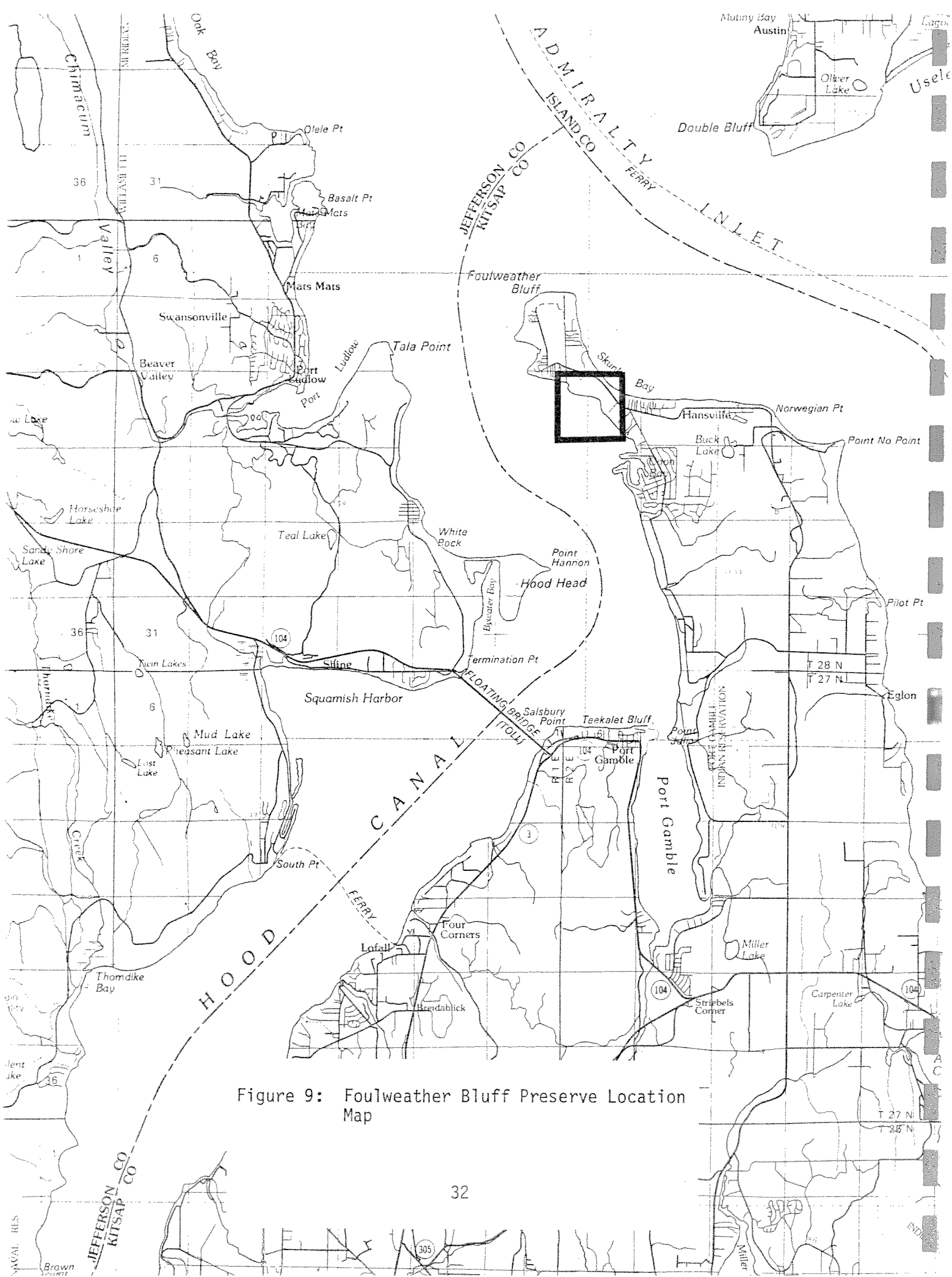


Figure 9: Foulweather Bluff Preserve Location Map

FOULWEATHER BLUFF PRESERVE

LOCATION:

Kitsap County; T28N, R2E, portions of section 18. The proposed site is located on the south side of Foulweather Bluff, at the north end of Hood Canal (figure 9).

SIZE:

The proposed site is approximately 112 acres.

PROPOSED BOUNDARY:

The proposed boundary includes the berm, all of the lagoon and a significant portion of the lagoon drainage basin which lies south of Twin Spits Road (figure 10). It also includes an undetermined amount of tidelands. The proposed boundary excludes the drainage located north of Twin Spits Road on the presumption that existing regulations are the most appropriate means of protecting that portion of the watershed.

METHOD OF PROTECTION:

Land owned by The Nature Conservancy is recommended for registration on the Washington Register of Natural Areas (see page 5). This area is currently managed as a Natural Area Preserve. All other land within the proposed boundary is recommended for acquisition. If acquisition is not possible, conservation easements and Right-of-First-Refusal should be negotiated.

MANAGEMENT CONSIDERATIONS:

- 1) Development or road building on the uplands should be prohibited.
- 2) Logging or alteration of native vegetation should be avoided.
- 3) Biocides or fertilizers should not be applied within the proposed site.
- 4) An agreement should be negotiated with Kitsap County to ensure that biocides will not be used along that portion of the roadway adjacent to the proposed boundary.
- 5) Physical alteration of the lagoon, berm, shore, or intertidal areas should not be allowed.
- 6) The berm, lagoon, and wetlands should be monitored for exotic species invasions or spread. Populations of exotic species should be controlled at low levels or eradicated if possible.

- 7) The quality of water flowing into the lagoon from the drainage north of Twin Spits Road should occasionally be checked.

ZONING:

The Shoreline Management Master Program designation for the proposed site is a combination of **Natural** and **Rural** (see glossary) (figure 11).

The Kitsap County Zoning Ordinance designates the proposed site as **Rural 2.5** and **Rural 2WF** (figure 12).

Kitsap County's **Rural 2.5** designation is intended for "...those areas where urban, semi-urban, or semi-rural development should not occur, and where residential sprawl should be discouraged. These are areas of low intensity uses including residential, recreational, agricultural and forestry. Rural areas are those which are not presently supplied nor are intended to be supplied with utilities and services. Development is generally served by individual wells and septic tanks. These areas are substantially free of commercial development except for limited rural types (e.g., small gas station, grocery store, etc.). Finally, they are characterized by low density residential uses, large lots, undeveloped land and forestry operations. The major portion of North Kitsap is designated Rural.

A maximum residential density of 1 unit per 2.5 acres (**Rural 2.5**) is allowed on platted lots without a planned unit development. This density may be modified, where topography and soil conditions permit, to an overall density of 1 unit per 1 acre provided common open space is retained for rural uses.

Kitsap County's **Rural Waterfront (Rural 2WF)** designation is similar to the **Rural 2.5** designation except that maximum development density is 2 units per acre.

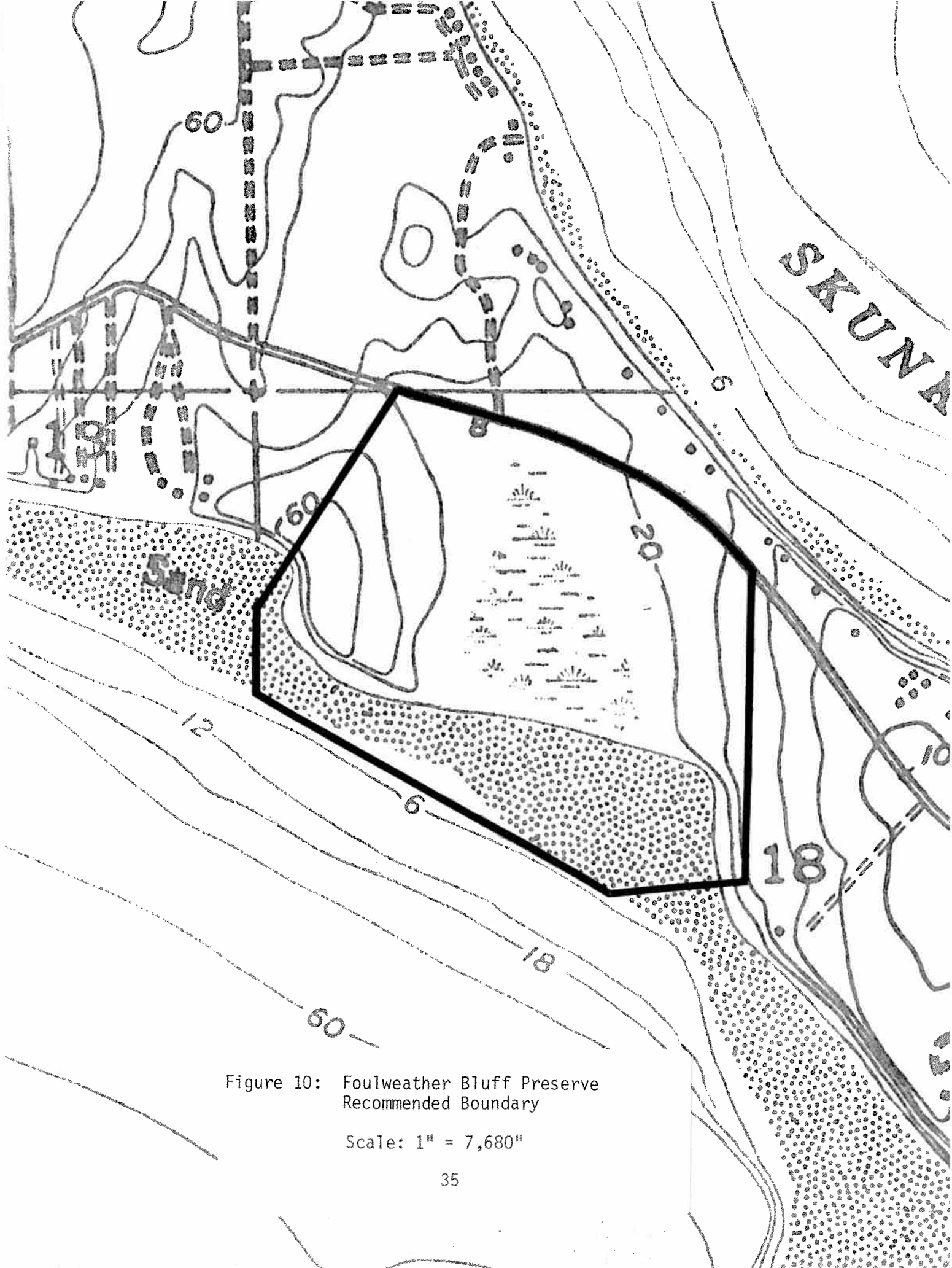
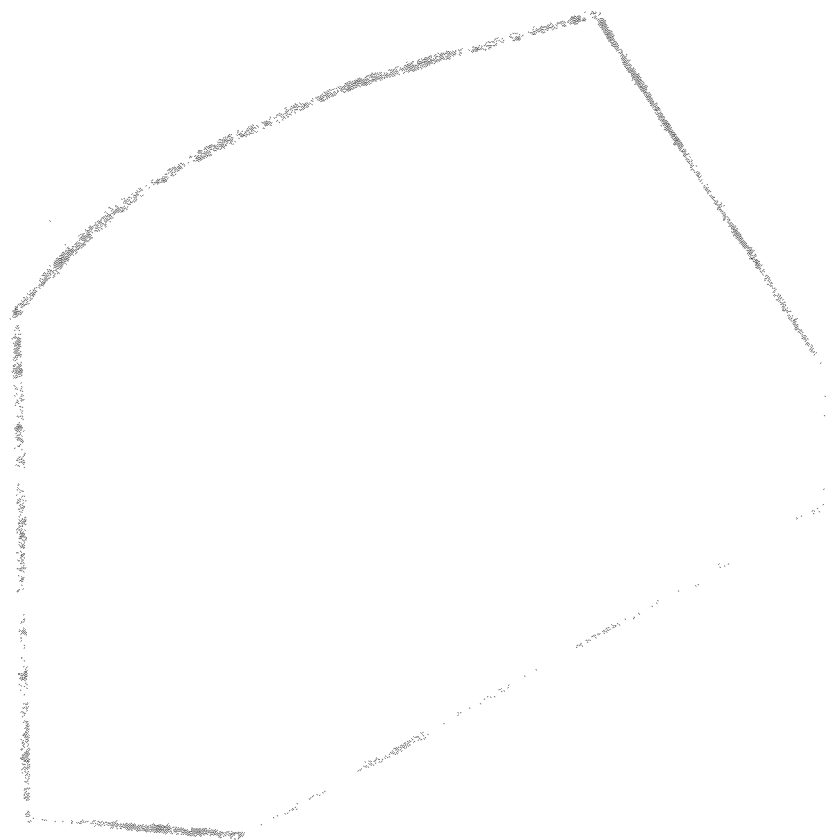


Figure 10: Foulweather Bluff Preserve
Recommended Boundary

Scale: 1" = 7,680"



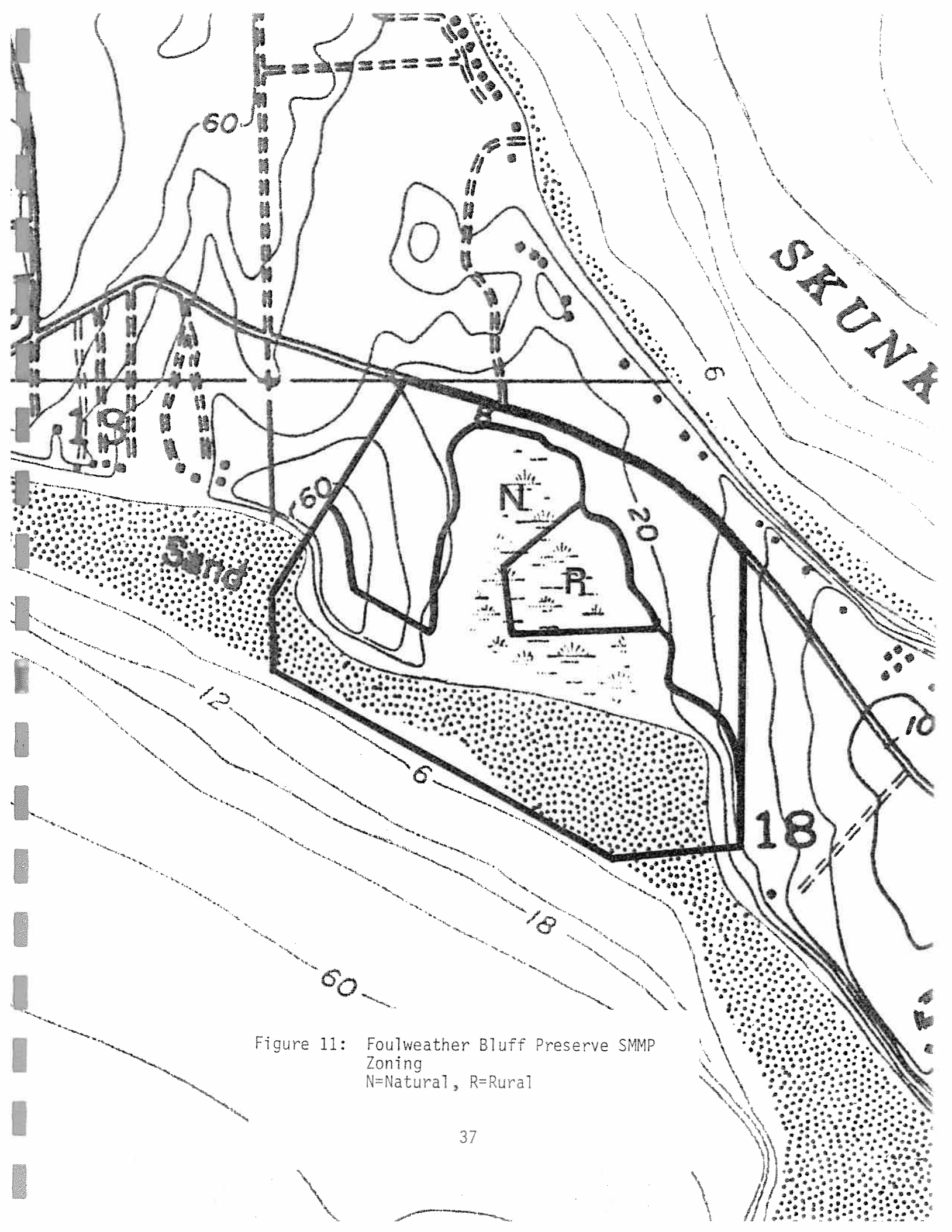


Figure 11: Foulweather Bluff Preserve SMMP
Zoning
N=Natural, R=Rural



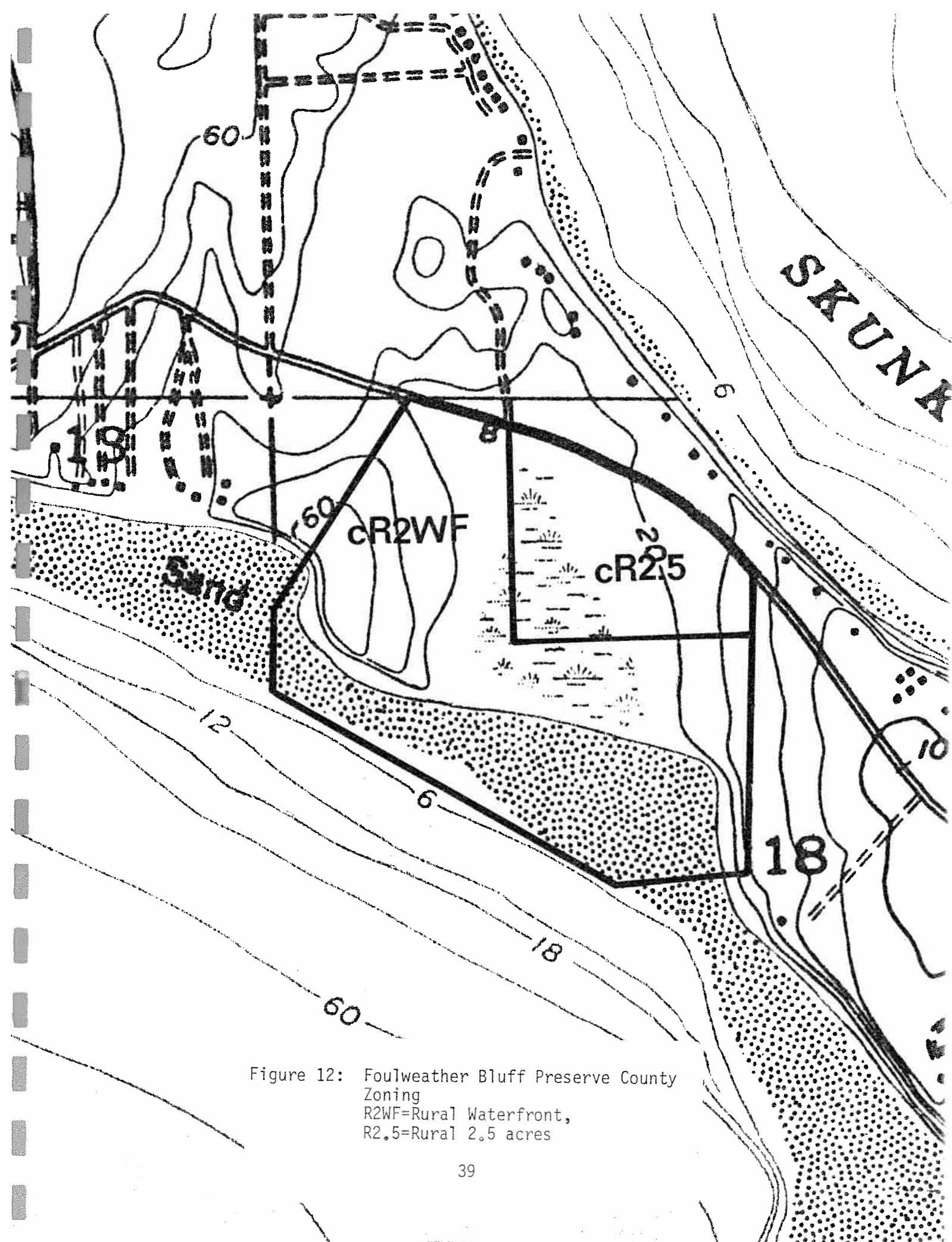


Figure 12: Foulweather Bluff Preserve County Zoning
 R2WF=Rural Waterfront,
 R2.5=Rural 2.5 acres



FOULWEATHER SALT MARSH

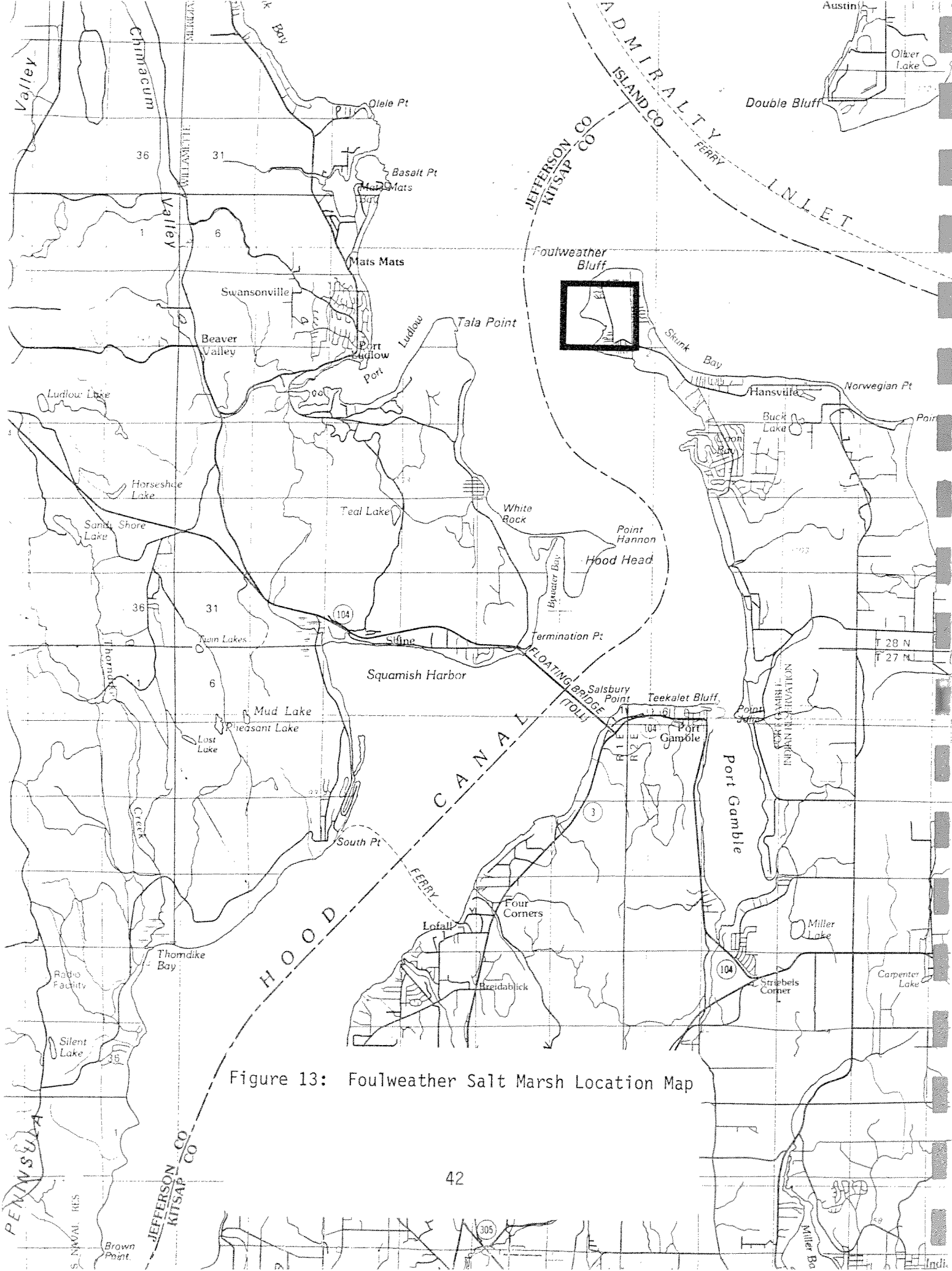


Figure 13: Foulweather Salt Marsh Location Map

FOULWEATHER SALT MARSH

LOCATION:

Kitsap County; T28N, R1E, portions of section 12. The proposed site is located at the north end of the Kitsap Peninsula, on the west side of Foulweather Bluff (figure 13).

SIZE: The proposed site is approximately 38 acres.

PROPOSED BOUNDARY:

The proposed boundary includes most of the salt marsh and berm, plus the steep bluff rising up to the east from the salt marsh (figure 14). It excludes the northern portion of the salt marsh and berm which have been divided into several small lots and receive intensive human use.

The bluff east of the salt marsh provides an essential physical buffer and provides habitat for birds which feed in the wetland.

METHOD OF PROTECTION:

The proposed site is recommended for conservation easements.

MANAGEMENT CONSIDERATIONS:

- 1) No roads should be built along the top of the bluff or down the bluff face.
- 2) Vegetation should not be removed from the bluff.
- 3) Houses or other structures should be set back from the bluff edge so that they do not cause slumping of the bluff.
- 4) The natural drainage into the site should not be altered.
- 5) Commercial harvesting of shellfish should be prohibited.
- 6) Human caused physical alteration of the proposed site should be avoided.
- 7) The salt marsh should be monitored for the invasion or spread of exotic plant species. Populations of these species should be controlled to low levels or eradicated, if possible.
- 8) Biocides or fertilizers should not be used within the proposed boundary.
- 9) Water quality within the site should be checked periodically and if a problem is identified, appropriate remedial action should be taken.

ZONING:

Under the Shoreline Management Master Program, the marsh, berm, and bluff are designated **Natural** (see glossary) (figure 15).

In the North Kitsap County Zoning Ordinance, the proposed area is zoned Rural 2WF (figure 16).

Lands designated as Rural 2WF by Kitsap County are "...those areas where urban, semi-urban, or semi-rural development should not occur, and where residential sprawl should be discouraged. These are areas of low intensity uses including residential, recreational, agricultural and forestry. Rural areas are those which are not presently supplied nor are intended to be supplied with utilities and services. Development is generally served by individual wells and septic tanks. These areas are substantially free of commercial development except for limited rural types (e.g., small gas station, grocery store, etc.). Finally they are characterized by low density residential uses, large lots, undeveloped land and forestry operations. The major portion of northern Kitsap County is designated Rural.

Development of platted lots without a planned unit development may have a maximum residential density of 2 units per acre on waterfront property."

Foulweather Bluff *

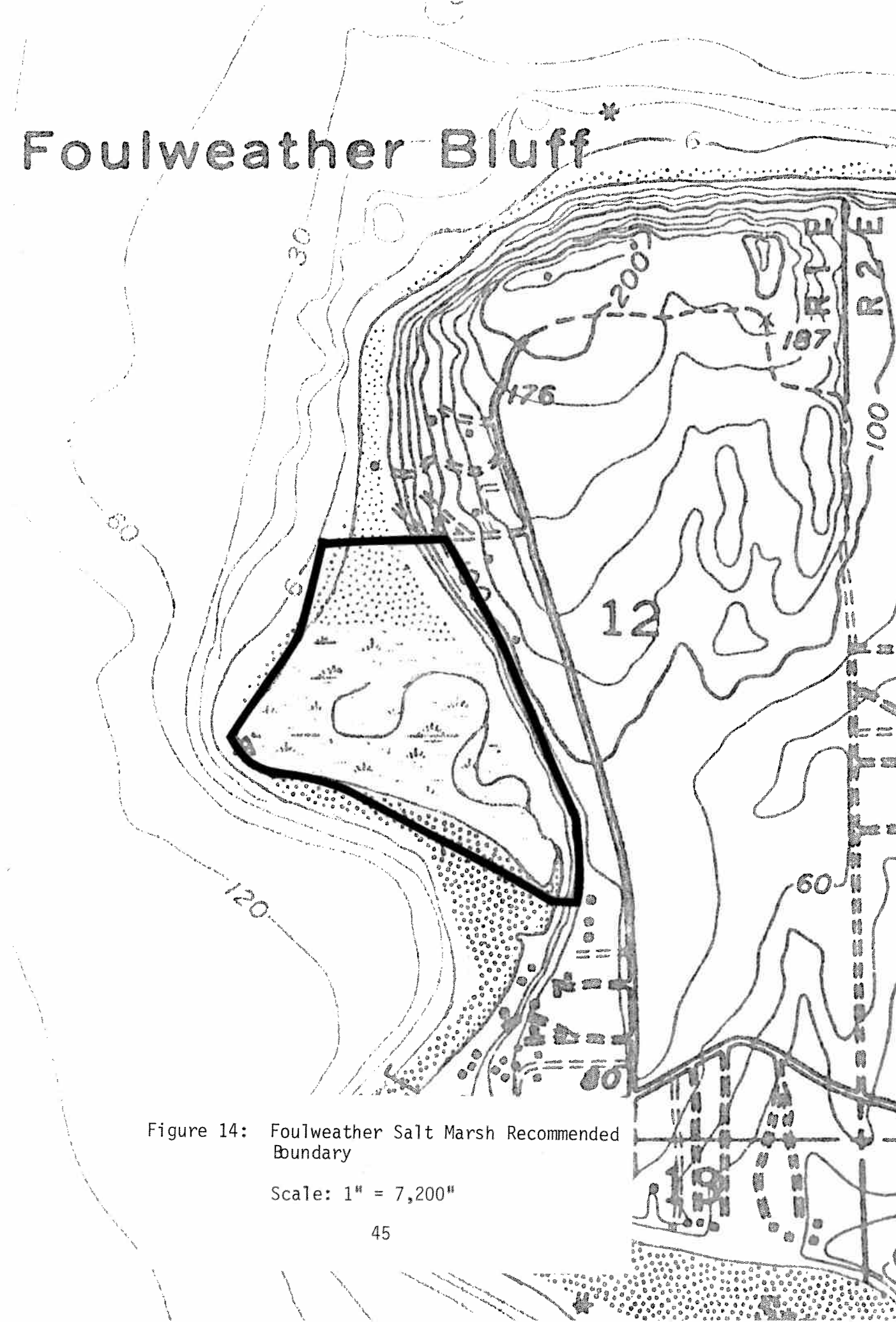
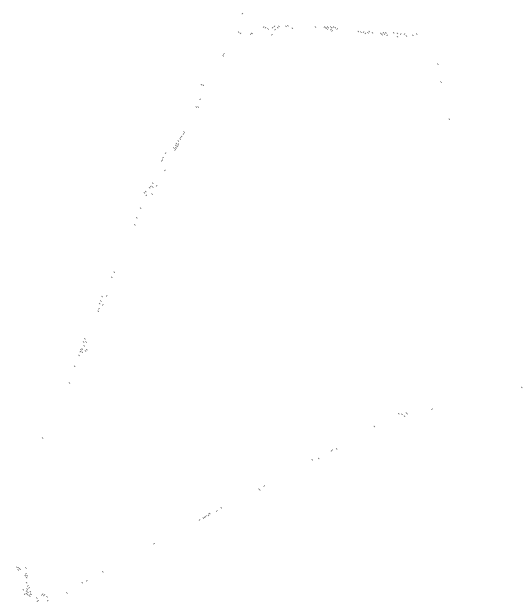


Figure 14: Foulweather Salt Marsh Recommended Boundary

Scale: 1" = 7,200"





Foulweather Bluff

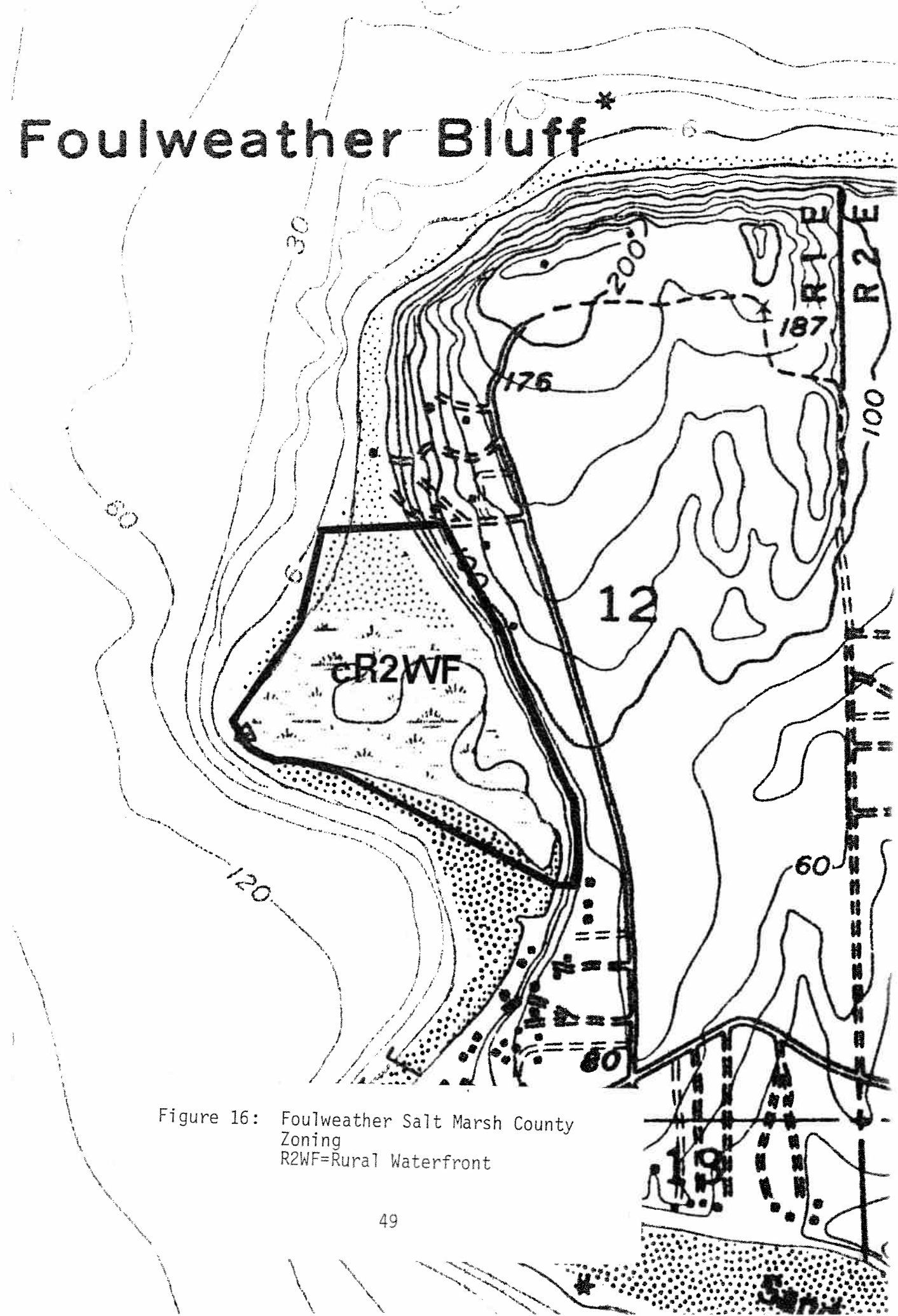
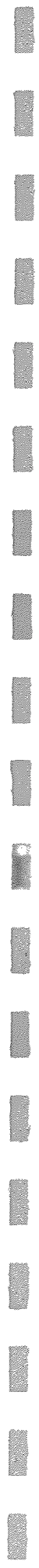


Figure 16: Foulweather Salt Marsh County Zoning
R2WF=Rural Waterfront



GULL HARBOR

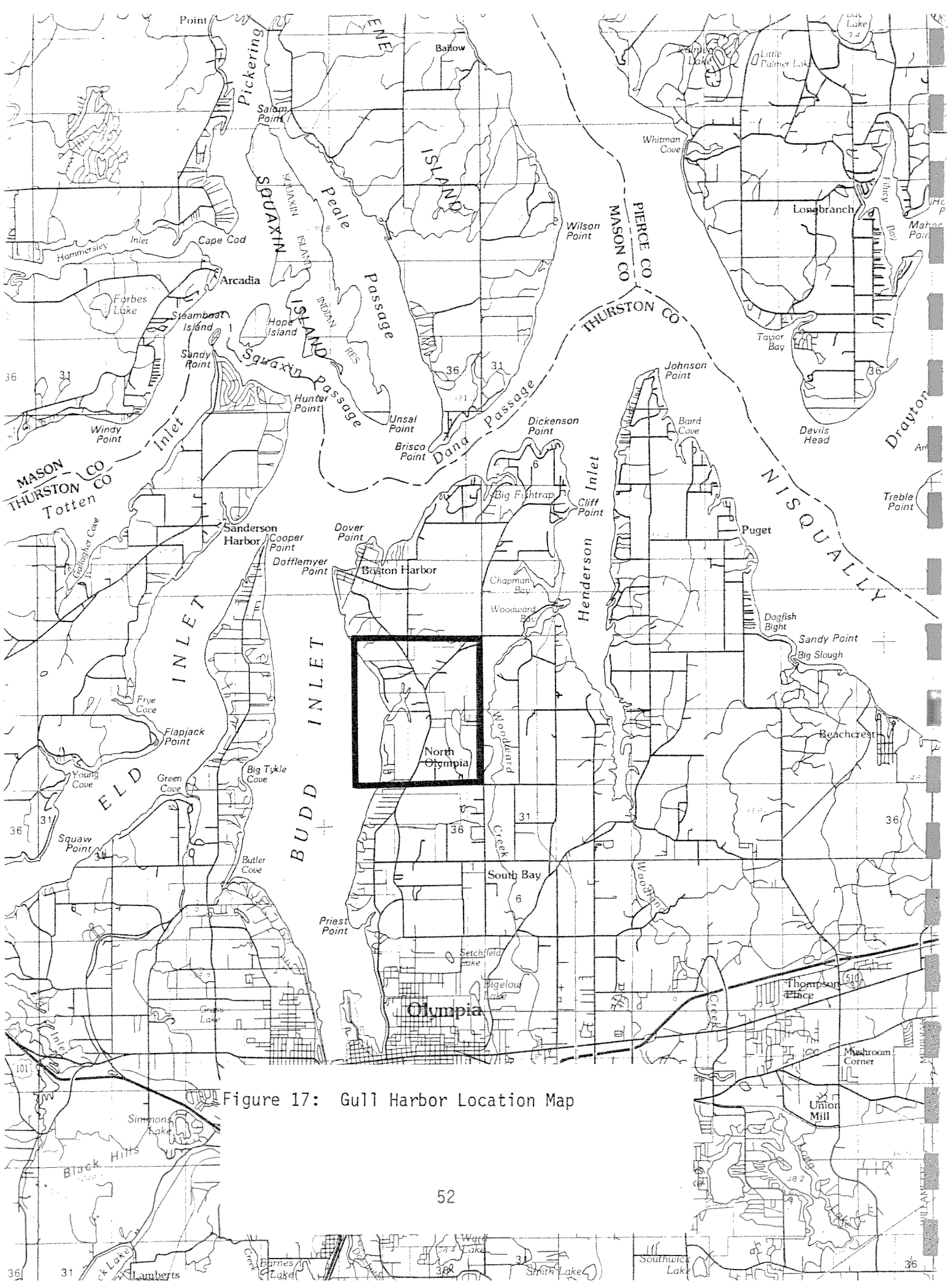


Figure 17: Gull Harbor Location Map

GULL HARBOR

LOCATION:

Thurston County; T19N, R2W, portions of sections 23, 24, 25, 26, 41, and 45. Gull Harbor is located on the west side of Budd Inlet, north of Olympia (figure 17).

SIZE:

The proposed site is approximately 115 acres.

PROPOSED BOUNDARY:

The proposed boundary includes Gull Harbor, portions of the four streams which flow into it, and a 100 to 200 foot buffer around the harbor and streams (figure 18).

The proposed boundary protects Gull Harbor from physical alteration. Inclusion of the buffer and streams helps protect water quality, provide habitat for wildlife associated with the wetland, provide a visual and noise buffer, and protects the upland vegetation which shades the wetlands and provide detritus to the system.

METHOD OF PROTECTION:

The proposed site is recommended for protection by a combination of registration on the Washington Register of Natural Areas (see page 5), and conservation easements. Acquisition should be considered for critical parcels where registration or conservation easements are not possible.

MANAGEMENT CONSIDERATIONS:

- 1) Further topographic alteration (filling, dredging, diking, etc.) or dock building should be prohibited.
- 2) Further development or road building should be prohibited.
- 3) Native vegetation should not be cut or removed.
- 4) Livestock should be excluded from within the proposed boundary.
- 5) Existing culverts should be maintained to allow passage of anadromous fish.
- 6) Biocides should not be used within the proposed boundary. An agreement should be negotiated with Thurston County to not spray the roadsides where roads cross the drainages into Gull Harbor.

ZONING:

The Shoreline Management Master Program designation for the proposed site is **Conservancy** (see glossary) (figure 19).

In the Thurston County Zoning Ordinance and Official Zoning Map, Thurston County, Washington, the proposed site is designated **Rural Residential** with a maximum development density of 1 dwelling unit per acre (R 1/1) (figure 20).

Thurston County's R 1/1 designation is intended "to permit development in areas characterized by one or more of the following: (a) large portions of the area have soils with moderate to severe physical limitations for development; (b) being adjacent to areas having higher residential densities and availability of community services; (c) situated so that they have potential for scenic views and/or water access; or (d) located at a substantial distance from the urban core."

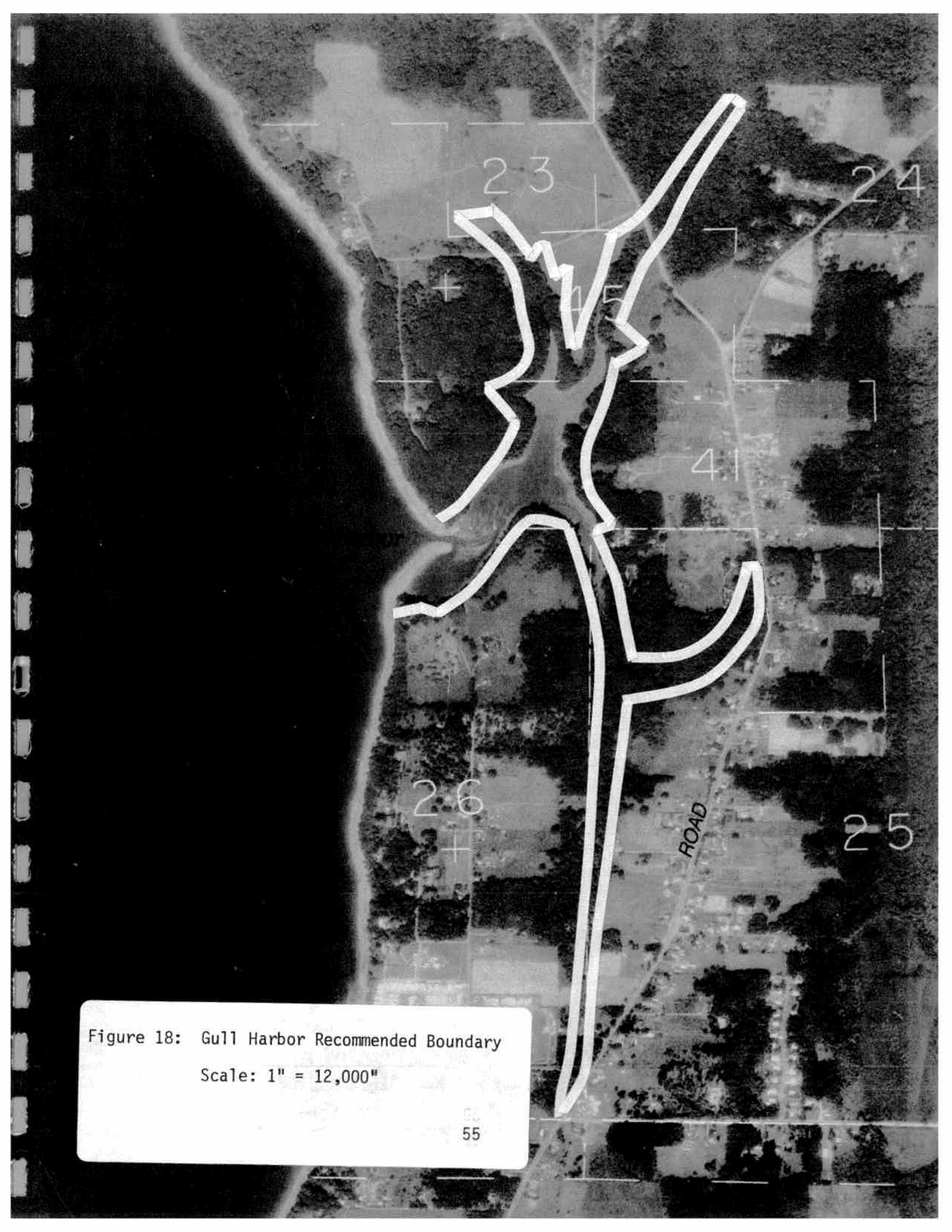
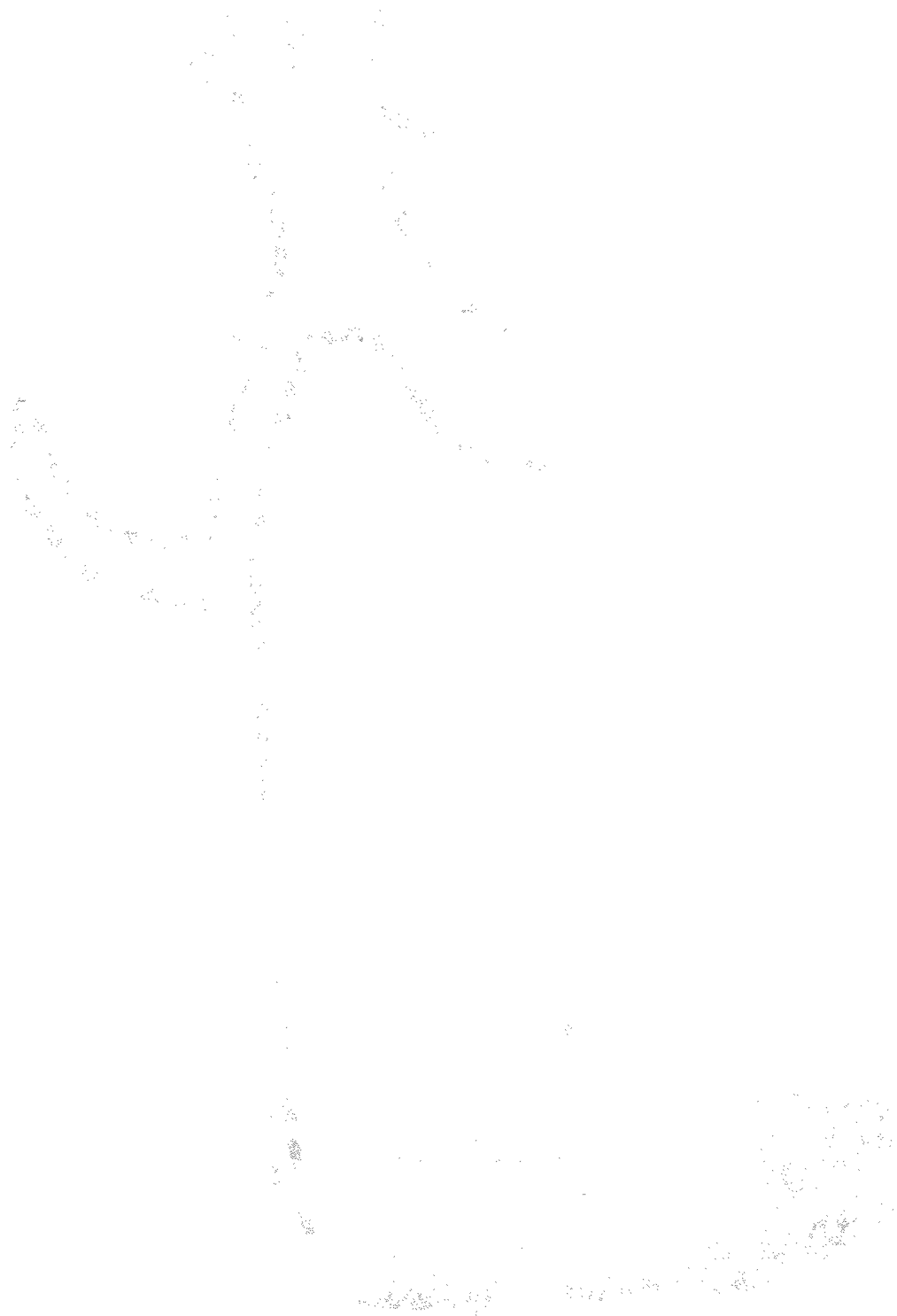


Figure 18: Gull Harbor Recommended Boundary

Scale: 1" = 12,000"



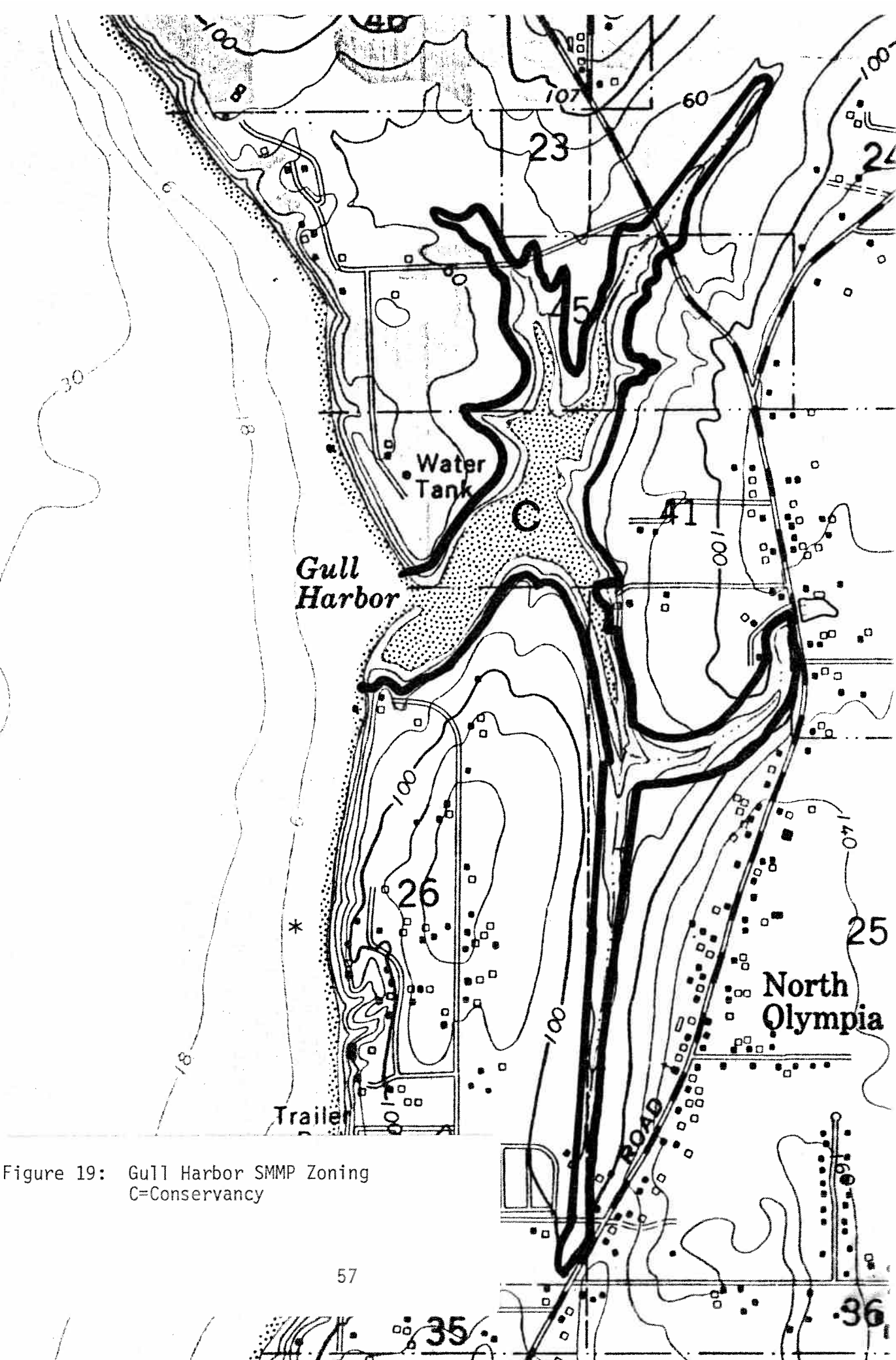


Figure 19: Gull Harbor SMMZ Zoning
 C=Conservancy



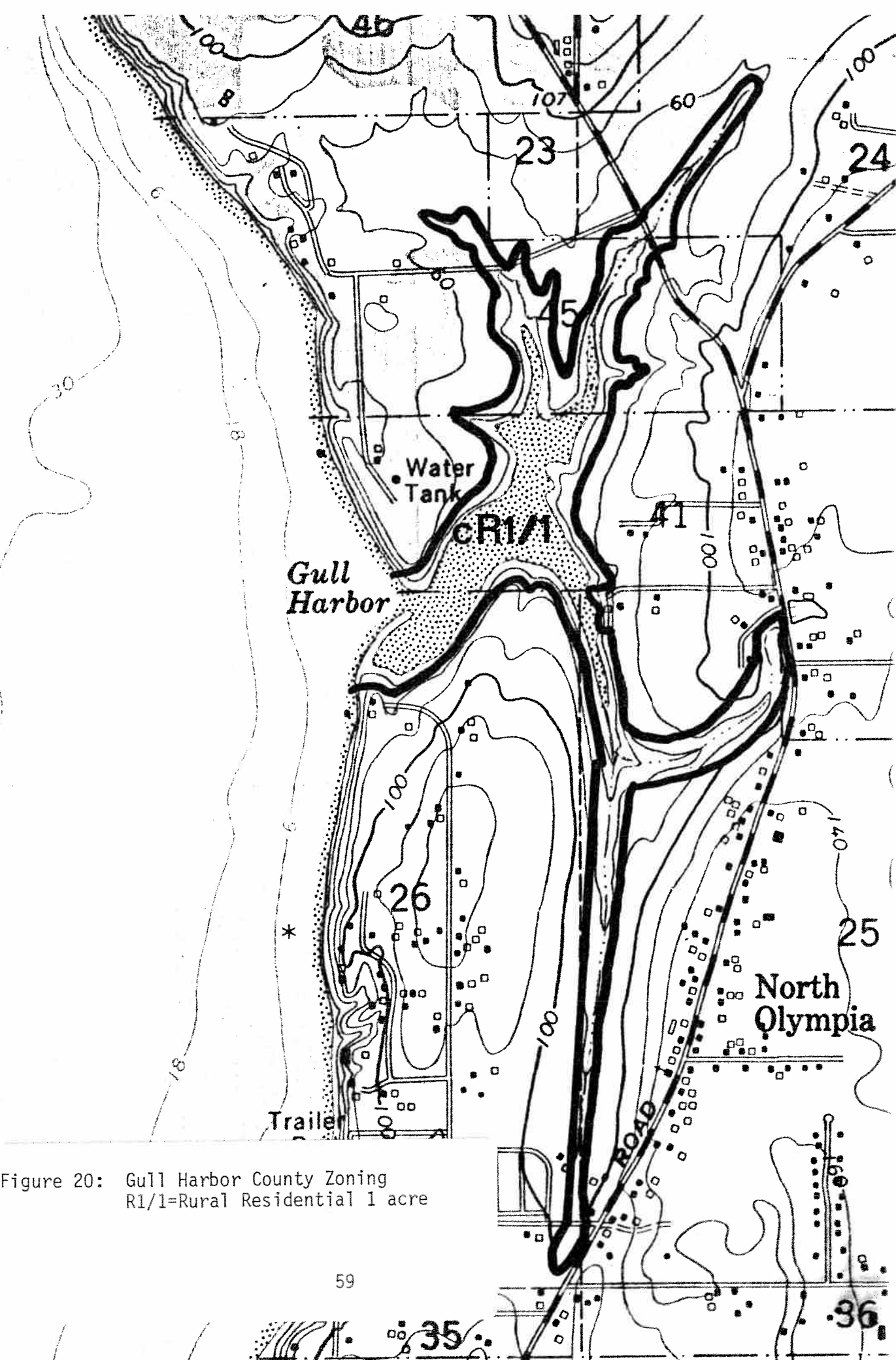


Figure 20: Gull Harbor County Zoning
 R1/1=Rural Residential 1 acre



HAMMA HAMMA RIVER DELTA

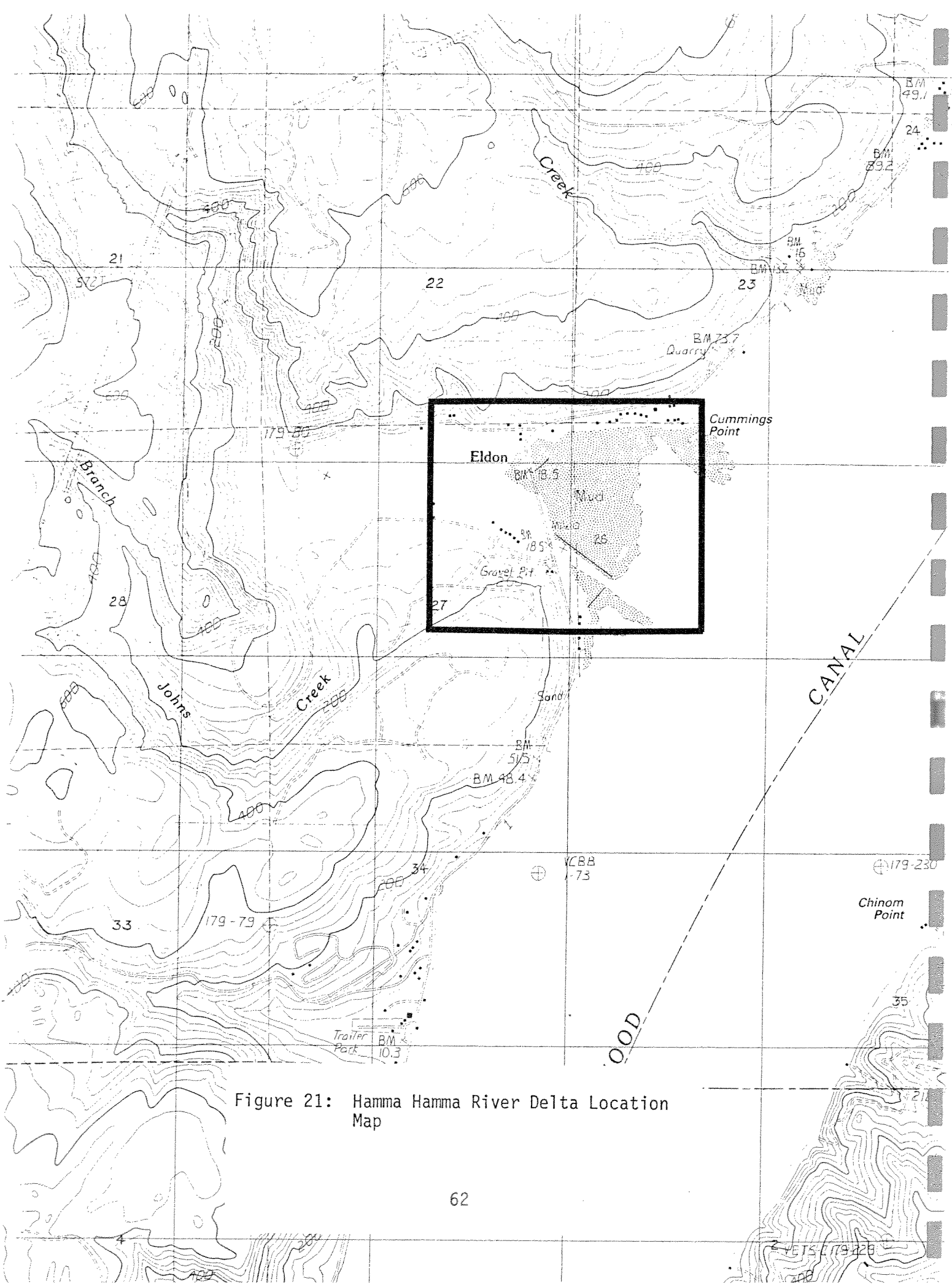


Figure 21: Hamma Hamma River Delta Location Map

HAMMA HAMMA RIVER DELTA

LOCATION:

Mason County; T24N, R3W, portions of sections 26 and 27. The proposed area is located on the west side of Hood Canal, 28 miles north of Shelton (figure 21).

SIZE:

The proposed site is approximately 152 acres.

PROPOSED BOUNDARY:

The proposed boundary encompasses the forested wetland, salt marsh, and non-vegetated tide flats which lie between the river and main distributary channels (figure 22). The river and distributary channels make a natural boundary which isolates the proposed site from adjacent land uses.

The tide flats are a buffer and provide habitat for a large number of birds and marine mammals. They also appear to be accreting and slowly making the transition to salt marsh.

METHOD OF PROTECTION:

The proposed site is recommended for acquisition.

MANAGEMENT CONSIDERATIONS:

- 1) Livestock access to the proposed site should be blocked.
- 2) Access to the dike road from the highway should be restricted.
- 3) Trespass should be discouraged.
- 4) Further diking, ditching, and filling of lands should be avoided.
- 5) Logging and other disturbance of native vegetation should be prohibited.
- 6) The elimination of the use of biocides along the roadway within the proposed boundary should be negotiated with the Washington Department of Transportation.

ZONING:

The Shoreline Management Master Program designates the tidelands and uplands east of Highway 101 as **Conservancy**. The remainder of the proposed site is **Rural** (see glossary) (figure 23).

Mason County has not published a comprehensive plan.

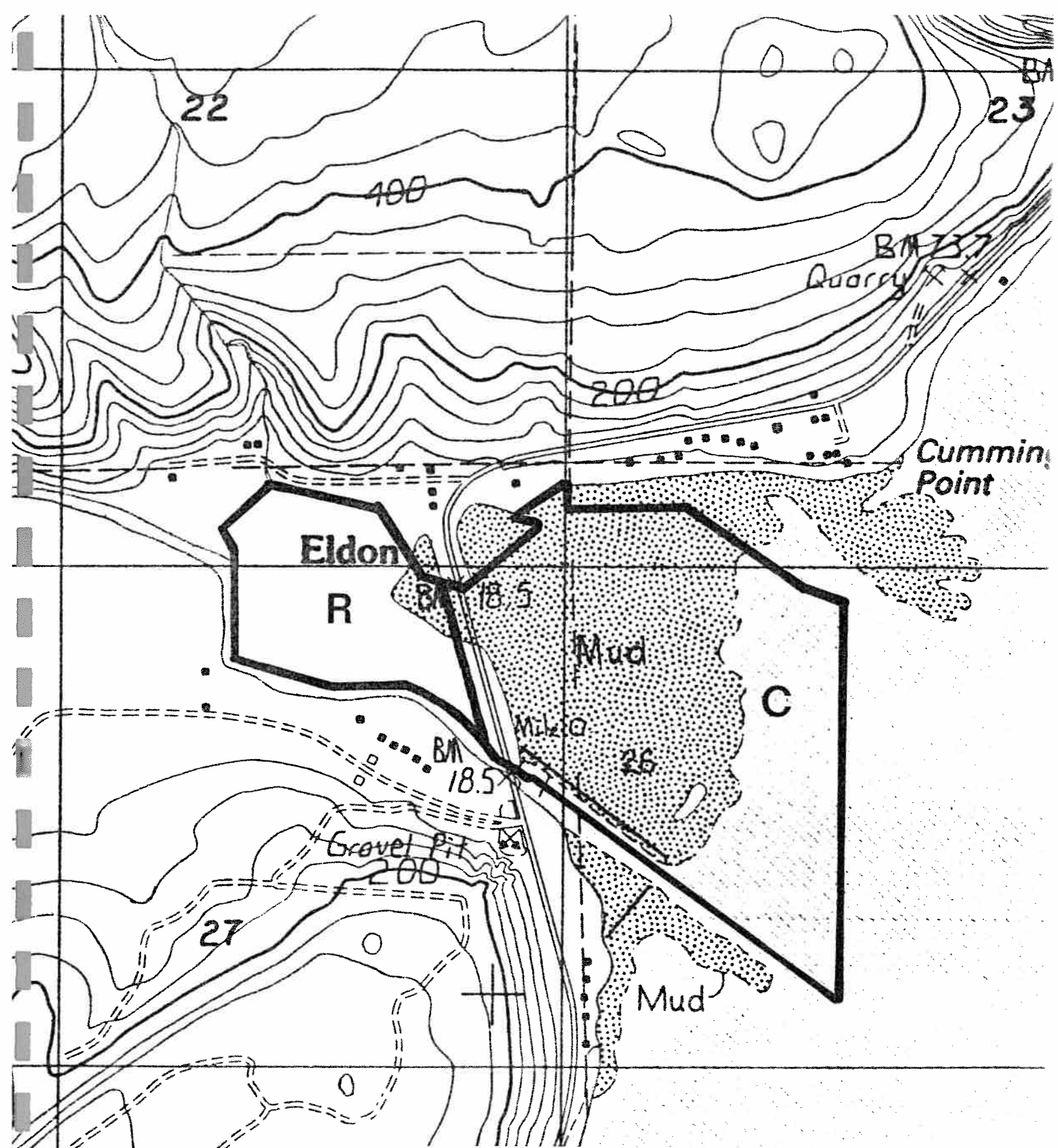


Figure 23: Hamma Hamma River Delta SMMP Zoning
 C=Conservancy, R=Rural



HENRY ISLAND



Figure 24: Henry Island Location Map

HENRY ISLAND

LOCATION:

San Juan County; T36N, R4W, portions of section 22. The proposed site lies between Open Bay, Nelson Bay, and Mosquito Pass at the south end of Henry Island (figure 24).

SIZE:

The proposed site is approximately 37 acres.

PROPOSED BOUNDARY:

The proposed boundary includes most of the salt marsh and berm between Open Bay and Nelson Bay (figure 25). It excludes all developed lands and most of the lands which have been subdivided. Except for tidelands, there is no buffer included in this site.

METHOD OF PROTECTION:

This proposed site is recommended for acquisition. If acquisition is not possible, conservation easements should be attempted.

MANAGEMENT CONSIDERATIONS:

- 1) Motorized and non-motorized vehicles should be prohibited.
- 2) Livestock should be excluded from within the proposed boundary.
- 3) Development or road building should not be allowed.
- 4) Fires and recreational use should be discouraged.

ZONING:

The Shoreline Management Master Program designates the tideflats as **Natural**, and the remainder of the proposed site as **Conservancy** (see glossary) (figure 26).

In the San Juan County Comprehensive Plan, the proposed site is zoned **Rural 5** (figure 27).

The intent of the **Rural** designation in San Juan County is to "protect comparatively undeveloped areas from urban and suburban forms of development. The purpose of the **Rural** designation is also to protect those areas which contribute to the rural, undeveloped atmosphere of the islands by limiting development to the types of uses which will not destroy or degrade that atmosphere." The **Rural 5** designation allows 1 dwelling unit per 5 acres.



595 000
FEET

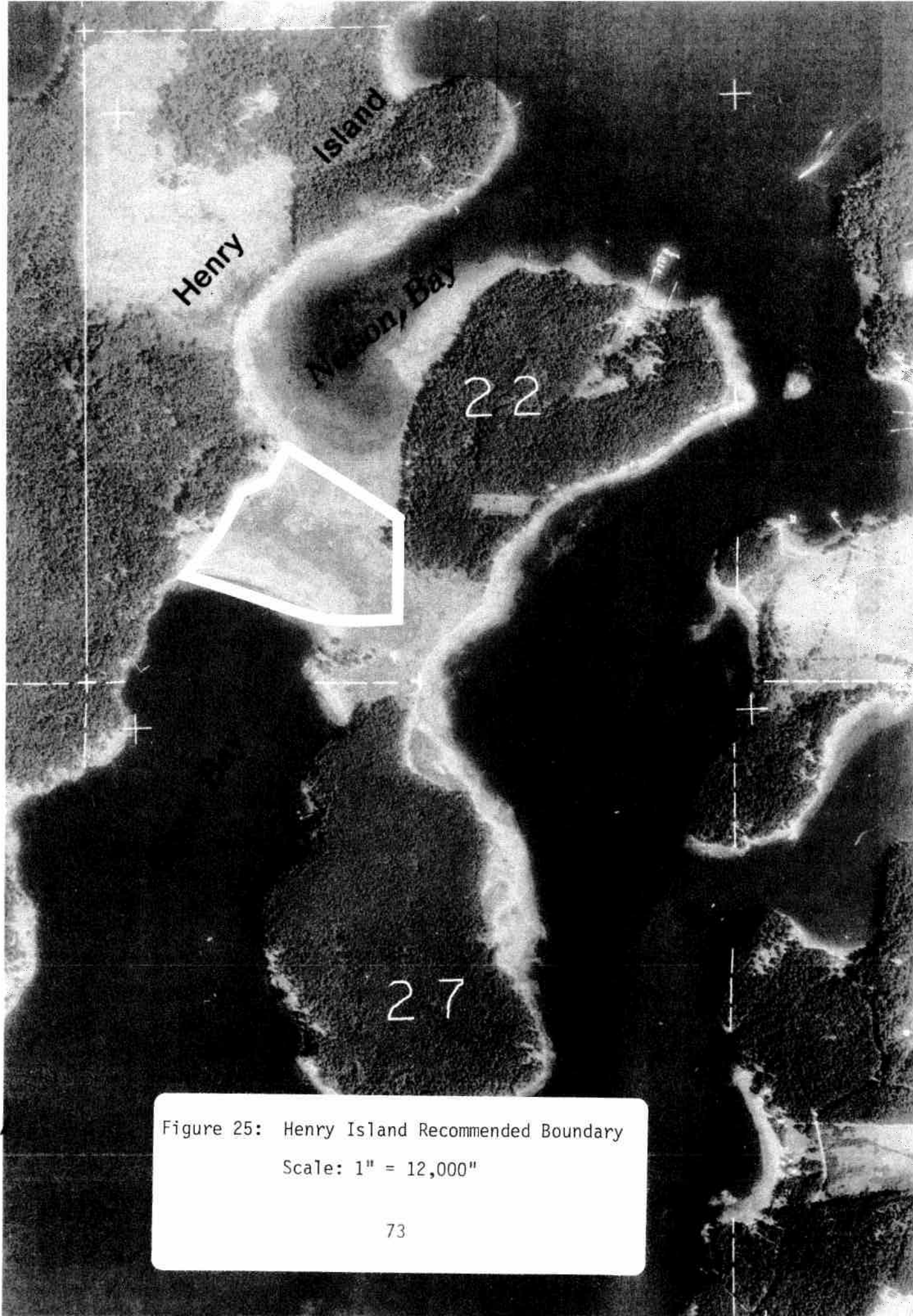


Figure 25: Henry Island Recommended Boundary
Scale: 1" = 12,000"

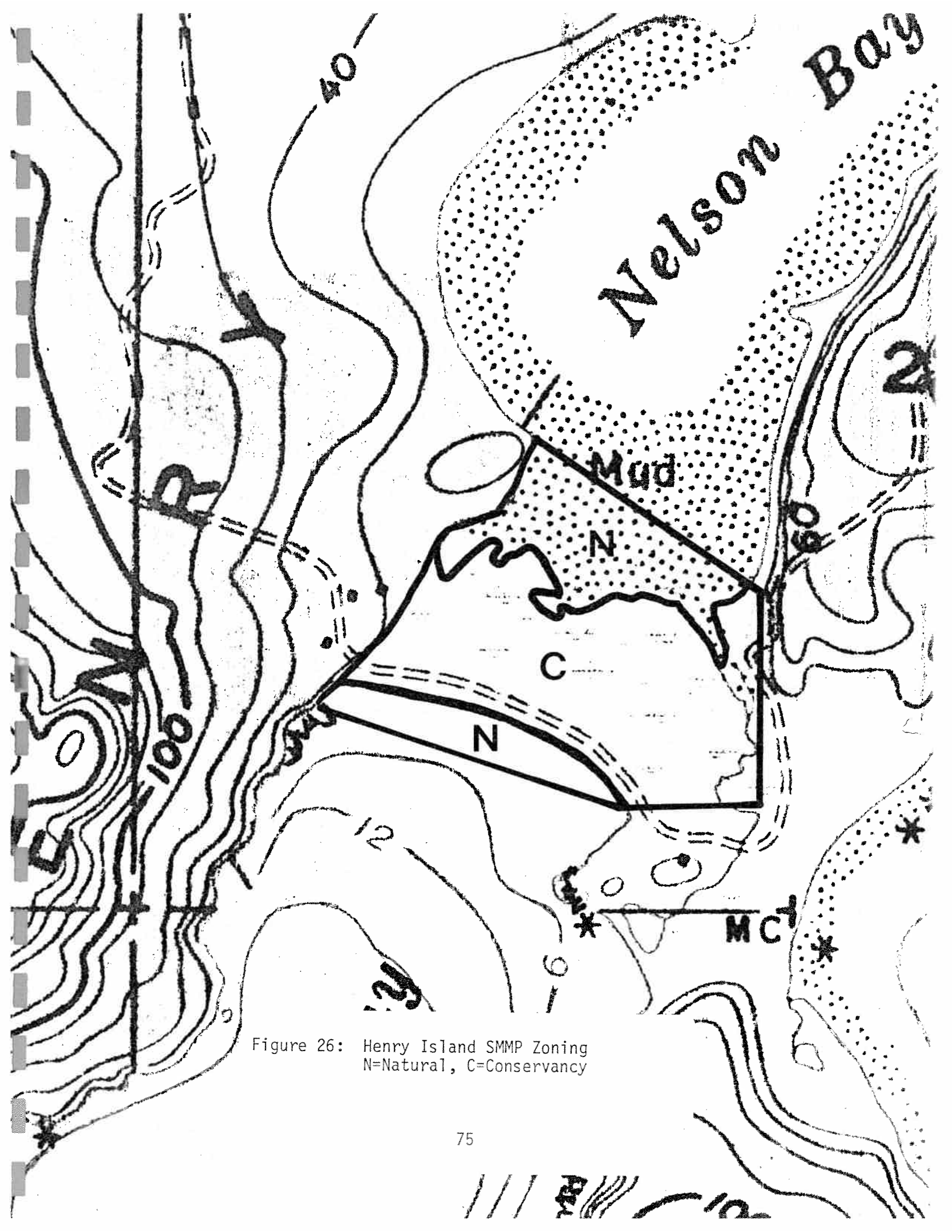


Figure 26: Henry Island SMMP Zoning
 N=Natural, C=Conservancy



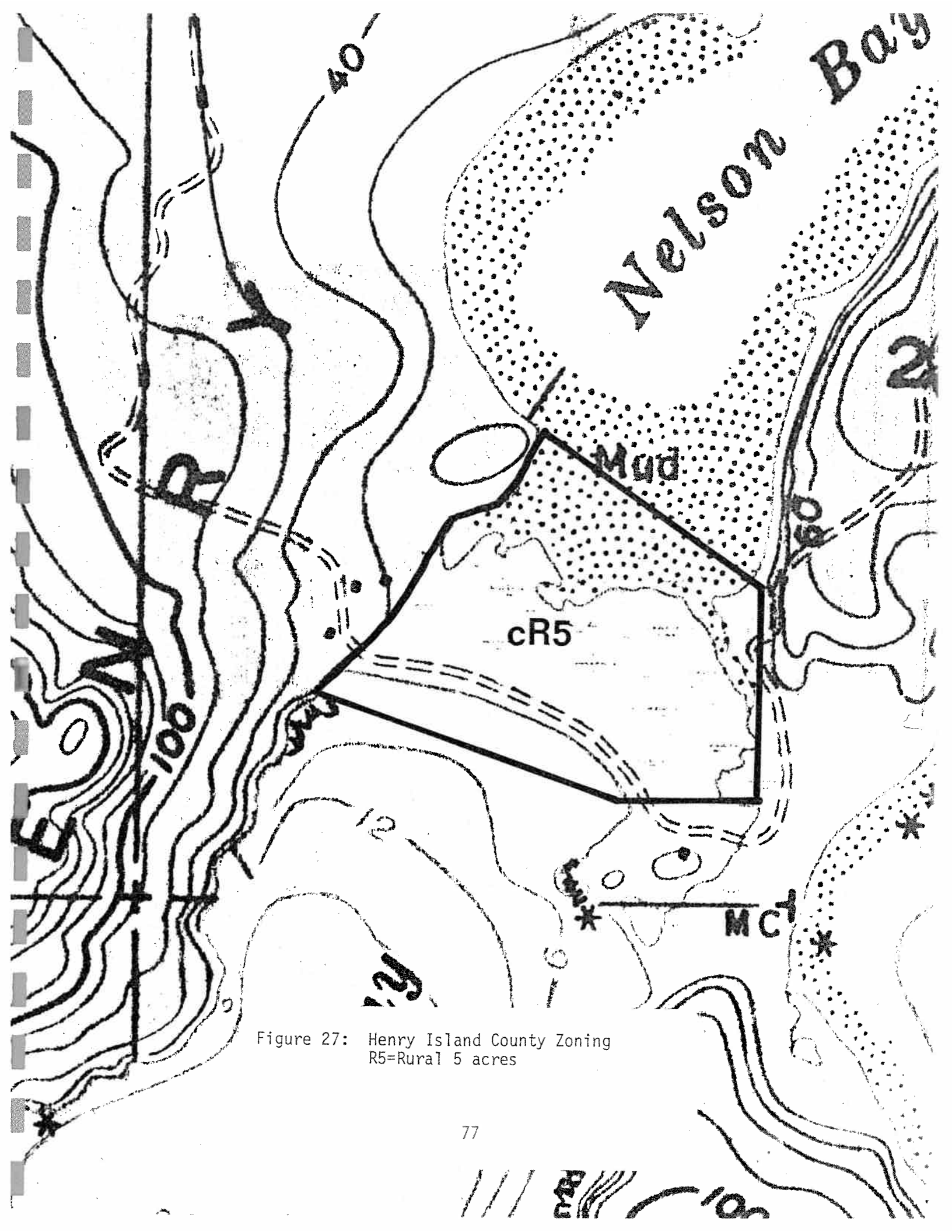


Figure 27: Henry Island County Zoning
R5=Rural 5 acres



KENNEDY CREEK

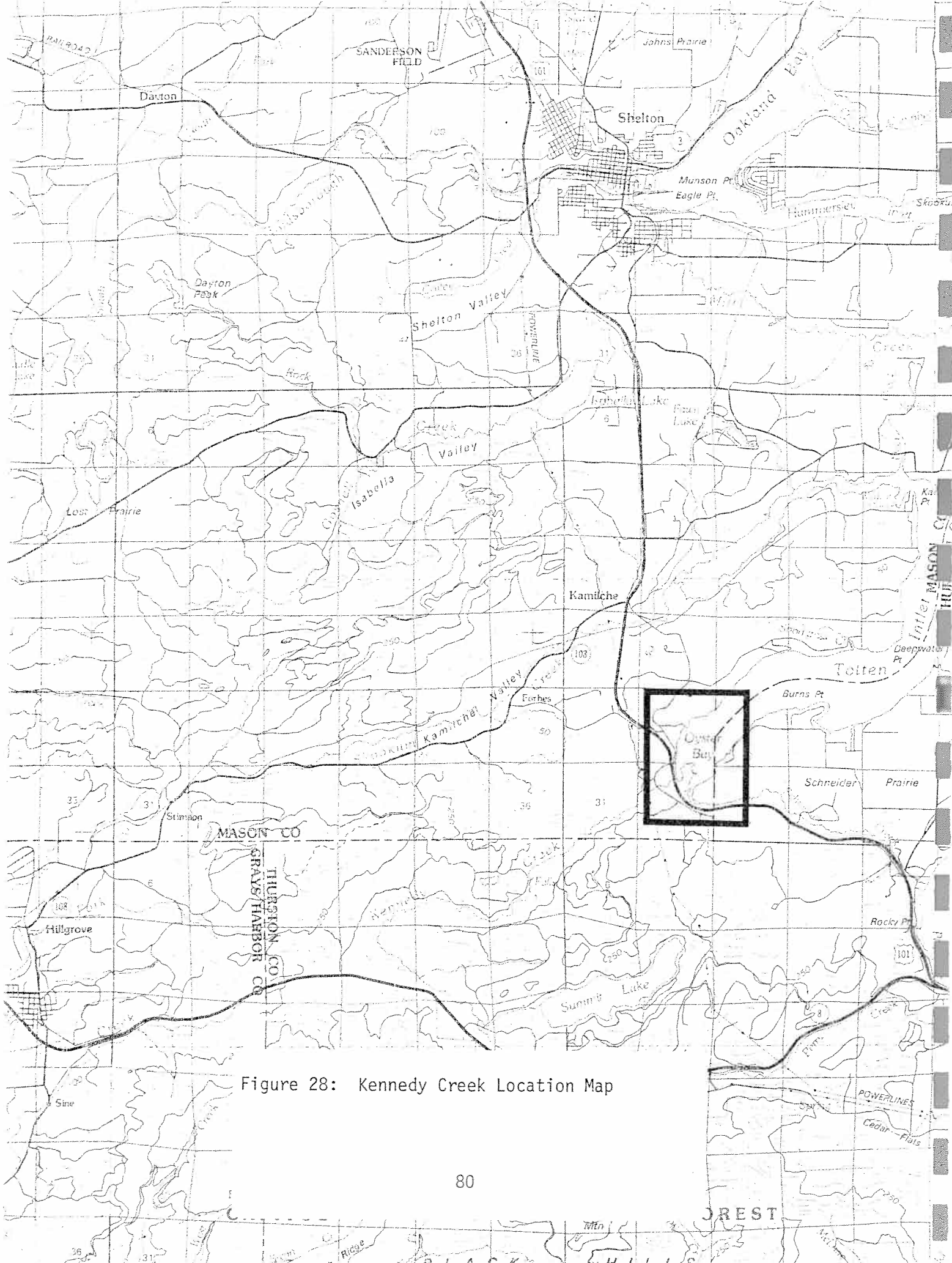


Figure 28: Kennedy Creek Location Map

KENNEDY CREEK

LOCATION:

Mason County; T19N, R3W, portions of sections 29 and 32. The area of interest is located east and north of U.S. Highway 101 at the southwest end of Oyster Bay (figure 28).

SIZE:

The proposed site is approximately 151 acres.

PROPOSED BOUNDARY:

The proposed boundary includes all of the tidal marsh which occurs at the mouth of Kennedy Creek, and which lies north and east of the highway. It also includes a large area of tideflats, portions of two stream channels, and an area of upland buffer (figure 29).

The tideflats provide important habitat for wildlife associated with the site, particularly shorebirds.

The upland buffer lies between the highway and the wetland, providing a physical and visual buffer. It also is habitat for wildlife associated with the wetland.

METHOD OF PROTECTION:

The proposed area is recommended for acquisition. Conservation easements are recommended for those parcels a landowner is not willing to sell.

MANAGEMENT CONSIDERATIONS:

- 1) Development and road building should not be allowed.
- 2) Removal or cutting of native vegetation should not be allowed.
- 3) Dredging, diking, filling, and grading should not be allowed.
- 4) Biocide use should not be permitted.
- 5) Water quality and flow into the site should be checked occasionally. If either becomes a problem, appropriate remedial action should be taken.

ZONING:

The Shoreline Management Master Program designates the proposed site as Conservancy (see glossary) (figure 30).

There is no comprehensive plan available for Mason County.

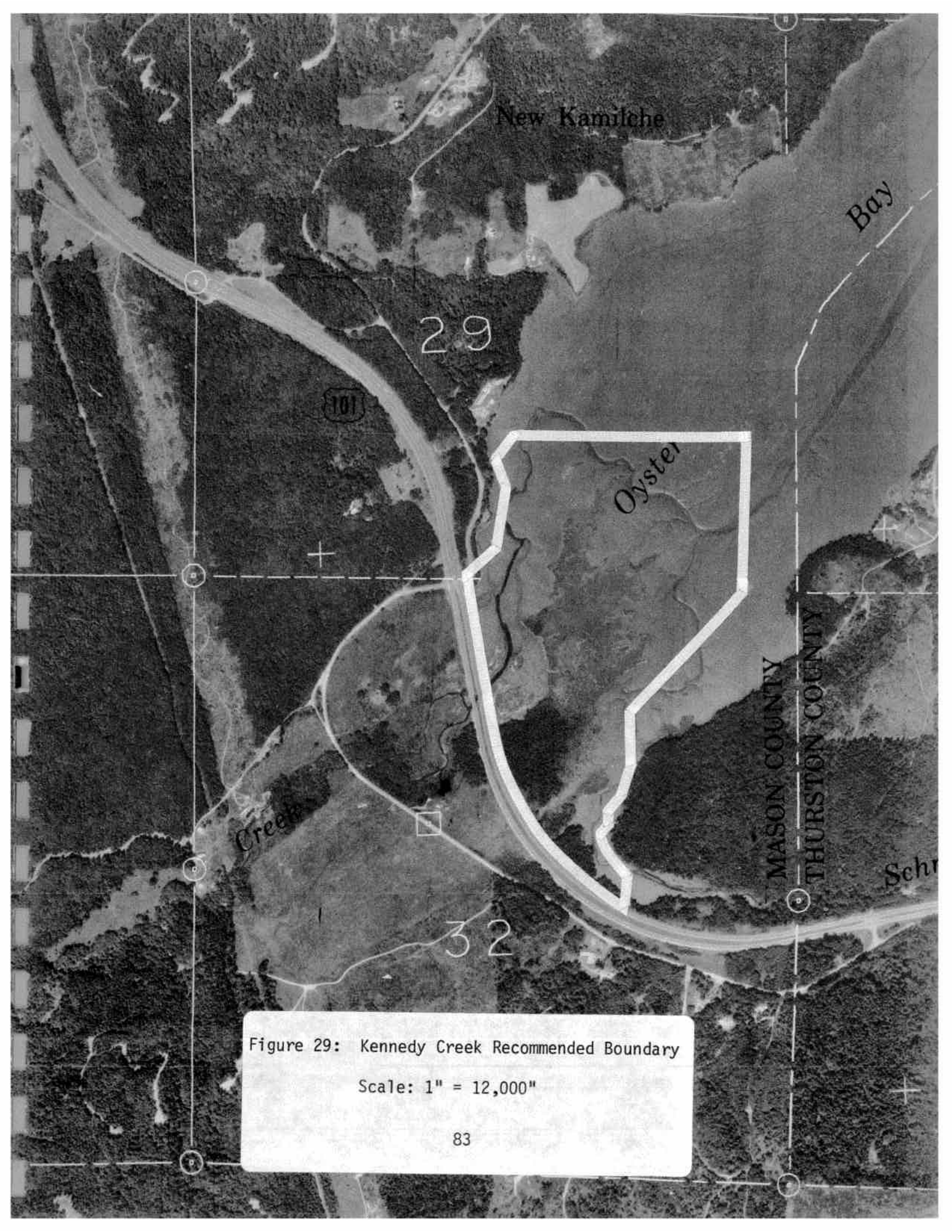


Figure 29: Kennedy Creek Recommended Boundary
Scale: 1" = 12,000"

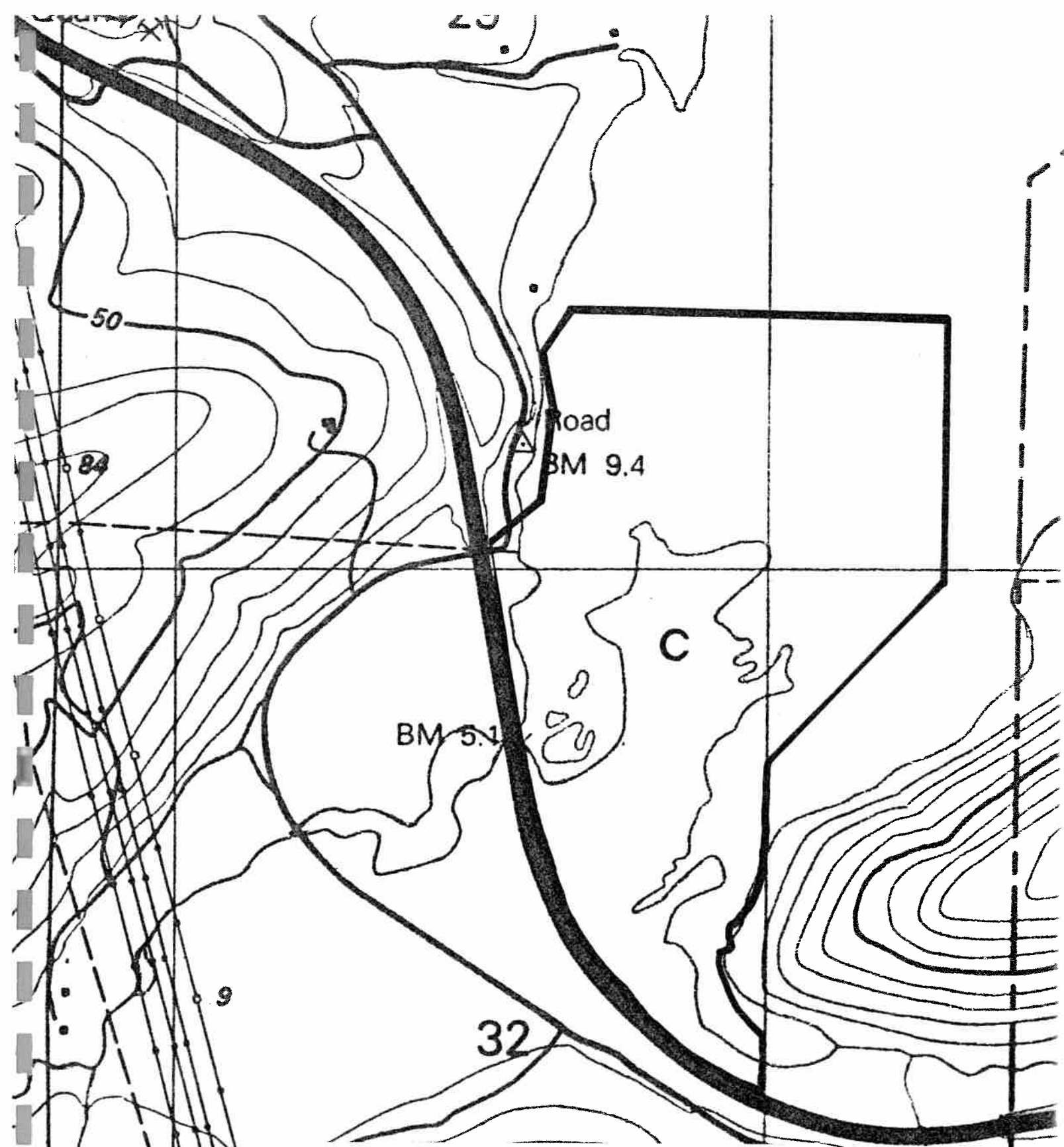
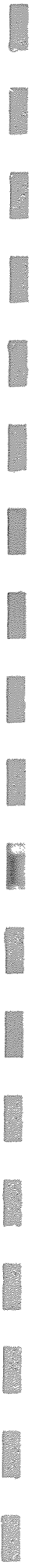


Figure 30: Kennedy Creek SMMP Zoning
C=Conservancy



LAKE HANCOCK

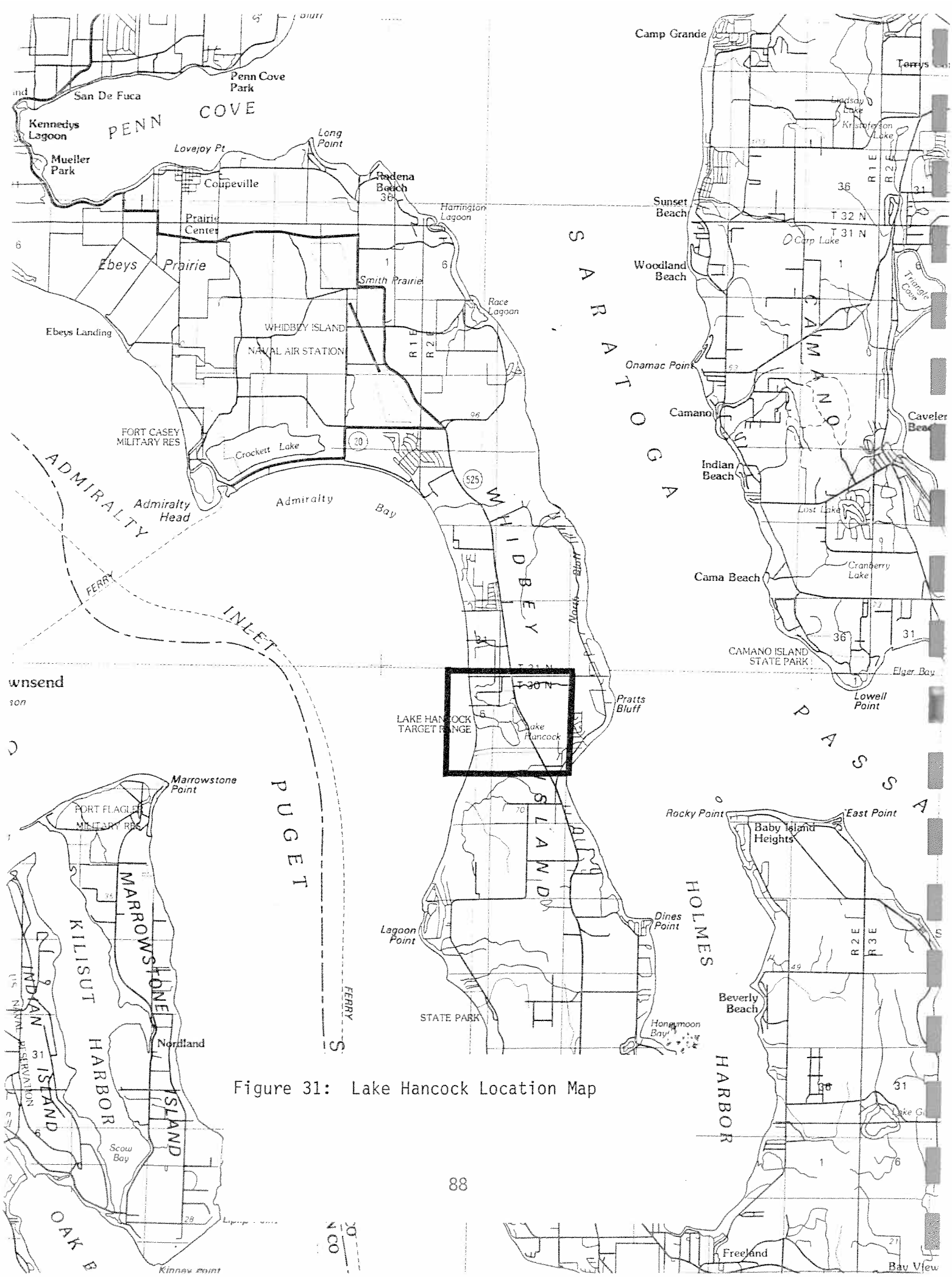


Figure 31: Lake Hancock Location Map

LAKE HANCOCK

LOCATION:

Island County; T30N, R2E, portions of sections 5, 6, 7 and 8. This site is located south of Admiralty Bay on the west side of Whidbey Island (figure 31).

SIZE:

The proposed site is approximately 440 acres.

PROPOSED BOUNDARY:

The proposed boundary includes all of Lake Hancock and its associated freshwater and saltwater wetlands (figure 32). It also includes an upland buffer. The boundary and size of the buffer are primarily determined by U.S. Navy ownership.

The buffer helps to protect freshwater quality and flow into the wetland. It also provides a visual and physical buffer for the system. The greatest deterrent to human use of the area, though, is the potential for unexploded bombs.

METHOD OF PROTECTION:

The federally owned portion of the site is recommended for registration on the Washington Register of Natural Areas (see page 5). Conservation easements are recommended for the privately owned lands.

MANAGEMENT CONSIDERATIONS:

Federally owned lands:

- 1) There should be no further bombing of the site.
- 2) Biocides should not be used within the proposed boundary.
- 3) The uplands should be allowed to regenerate with no further logging or manipulation.
- 4) There should be no further physical alteration of the wetlands, aquatic system, or berm.

Privately owned lands:

- 1) There should be no road building, housing or industrial development, or agricultural development within the proposed boundary.
- 2) Biocides should not be used within the proposed site.

- 3) There should be no alteration of the hydrology or drainage patterns.
- 4) Logging or removal of native vegetation should not be allowed.

ZONING:

The Shoreline Management Master Program designates most of the proposed area as **Natural** and a small area as **Rural** (see glossary) (figure 33).

In the Island County Comprehensive Plan, the U.S. Navy lands are not zoned. The privately owned lands are zoned **Forest Management** and **Wetland** (figure 34).

The **Forest Management** designation is intended to "...protect and encourage the long term productive use of Island County's forest land resources. It is established to identify geographical areas where a combination of soil, topography and climatic conditions allow management practices to be conducted in an efficient manner; to help maximize the productivity of the land so classified, consistent with standards and conditions that may be required to comply with any applicable overlay zone; to protect forest operations from interference by non-foresters; and to guarantee the preservation and maintenance of forest land areas for forest management use, free from conflicting non-forest uses. Secondary purposes of the Forest Management classification are to provide recreation opportunities, scenic open space, wildlife habitat and watershed management to the extent such uses are consistent with the primary purposes of the zone." Maximum tract or parcel size is 20 acres with 1 dwelling per 20 acres.

The **Wetland** designation is a temporary designation in place pending the revision of the county's Zoning Ordinance. The designation is intended to "preserve, improve, or protect" these wetlands. It requires maintenance of a 25 foot buffer and does not allow alteration of the wetland except through the county's permit process.

ADMIRALTY

INLET



Figure 32: Lake Hancock Recommended Boundary
Scale: 1" = 12,000"



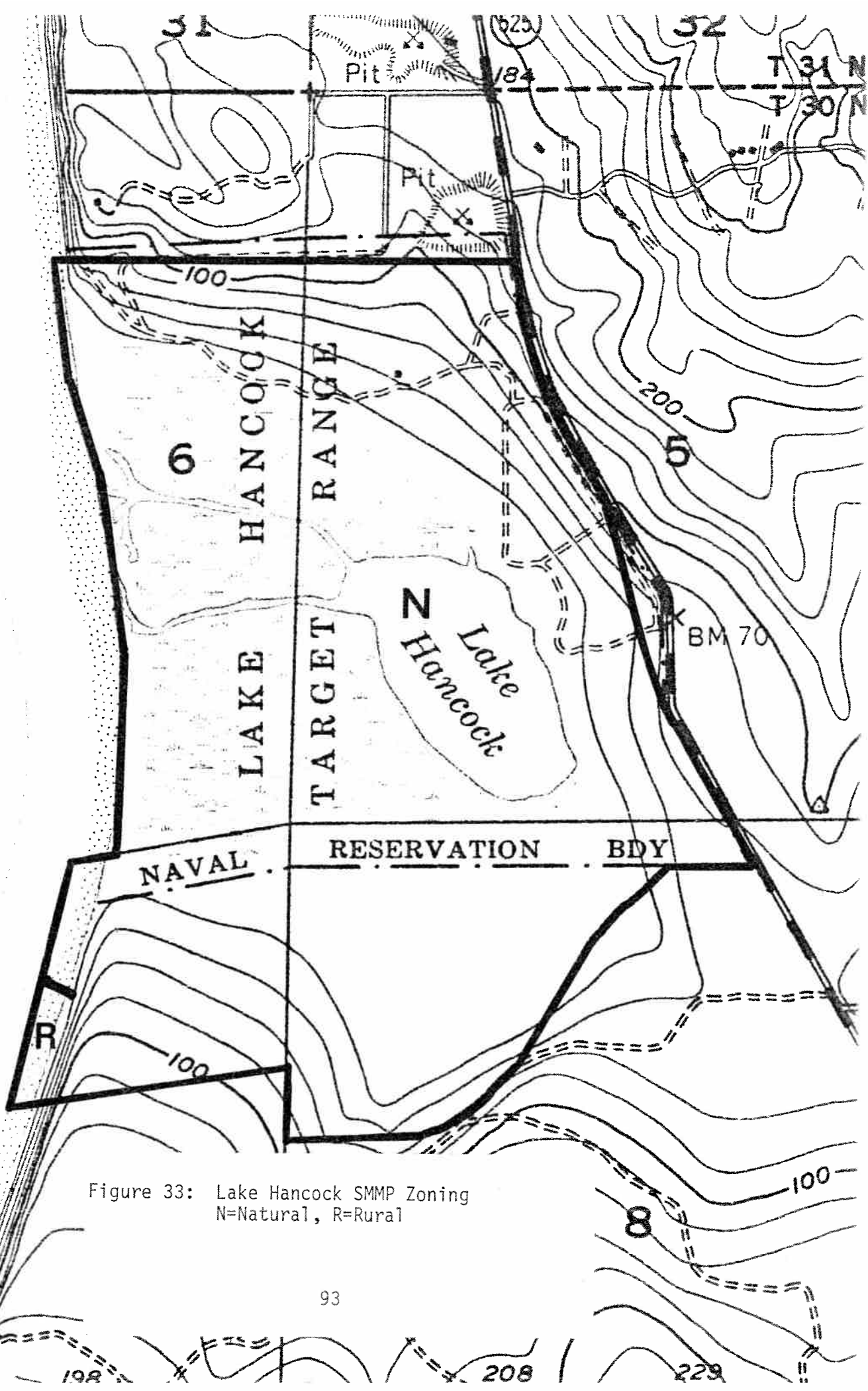
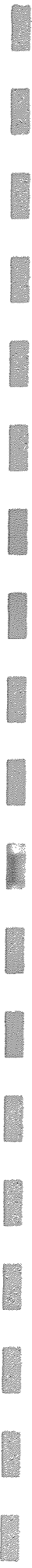


Figure 33: Lake Hancock SMMP Zoning
 N=Natural, R=Rural



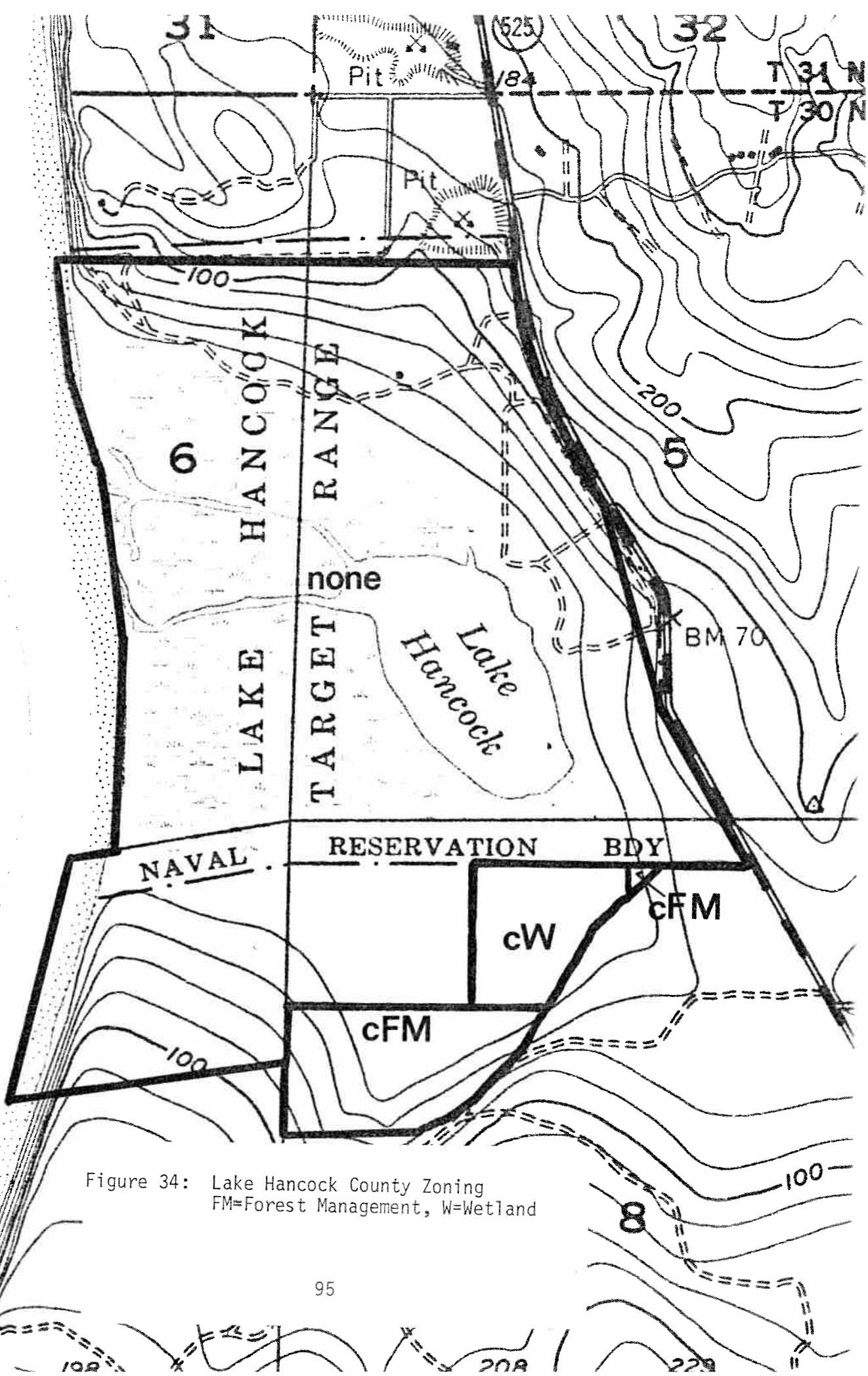


Figure 34: Lake Hancock County Zoning
 FM=Forest Management, W=Wetland



LYNCH COVE

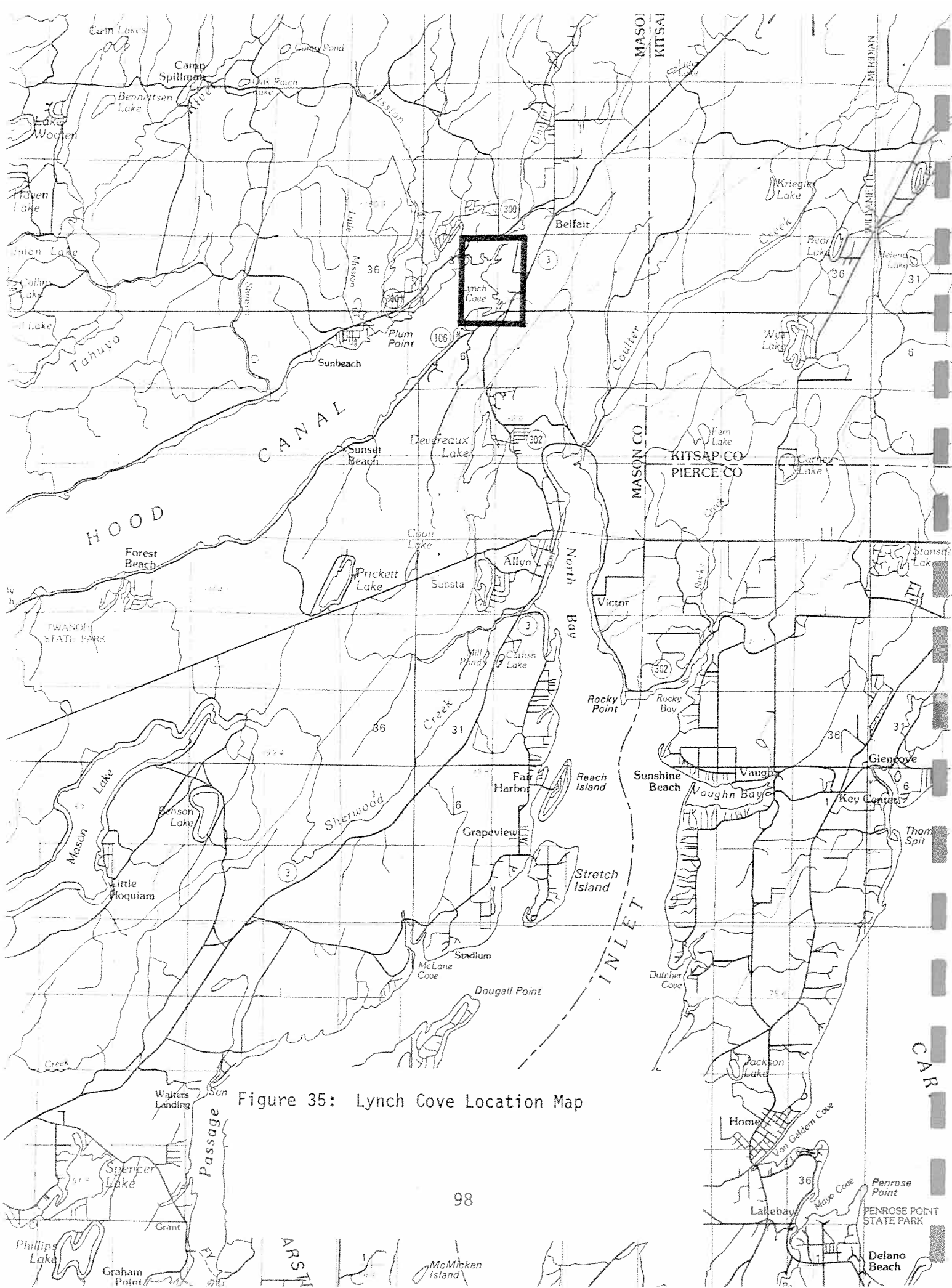


Figure 35: Lynch Cove Location Map

LYNCH COVE

LOCATION:

Mason County; T22N, R1W, portions of sections 5 and 6, and T23N, R1W, portions of sections 31 and 32. The site is located at the end of Hood Canal, southwest of Belfair, near the intersection of State Highways 3 and 106 (figure 35).

SIZE:

The proposed site is approximately 100 acres.

PROPOSED BOUNDARY:

The proposed boundary includes most of the high quality salt marsh in the southeast portion of Lynch Cove. It also includes adjacent tideflats and an upland buffer (figure 36).

The upland buffer is drawn to provide as much protection for the site as possible while excluding developed lands. It provides a physical and visual buffer, and helps protect the quality of freshwater flowing into the marsh. The buffer also provides habitat for wildlife associated with the wetlands.

METHOD OF PROTECTION:

The proposed site is recommended for acquisition. Conservation easements are recommended on those lands whose owners who do not wish to sell their land.

MANAGEMENT CONSIDERATIONS:

- 1) Further road building or development should not be allowed.
- 2) Cutting or removal of native vegetation should be avoided.
- 3) Biocide use should not be permitted.
- 4) Water quality of the cove and of freshwater flowing into the site should be checked occasionally. If water quality becomes a problem, appropriate remedial action should be taken.
- 5) There should be no topographic alteration (diking, ditching, filling, excavating, or other substrate manipulation) within the proposed boundary.
- 6) Alteration of the hydrology of the area should be avoided.

ZONING:

The Shoreline Management Master Program designates the Lynch Cove area as **Conservancy** and **Urban** (see glossary) (figure 37).

A Mason County Comprehensive Plan has not yet been produced.

31

MUD

Lynch Cove

Piles

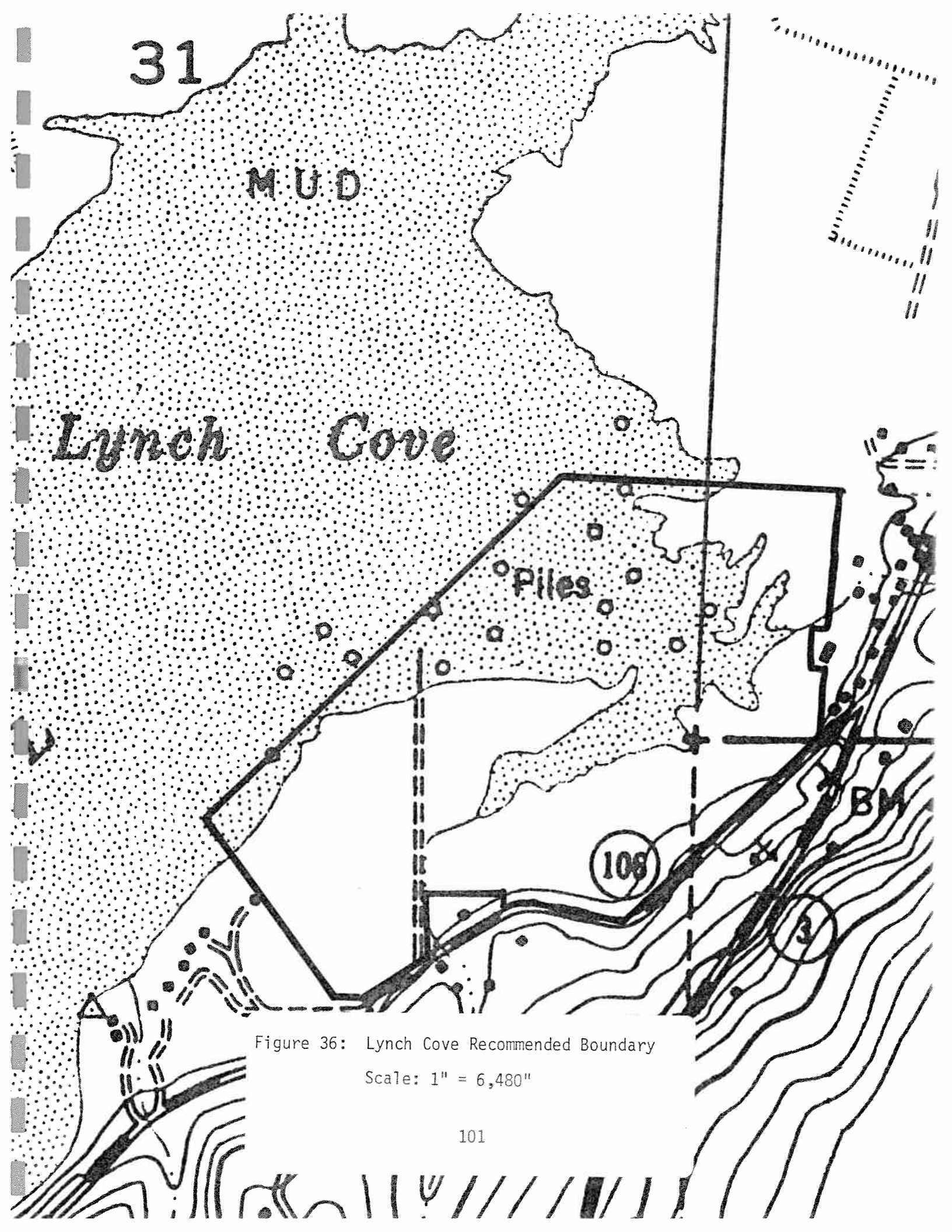
108

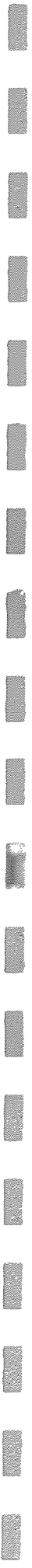
3

BM

Figure 36: Lynch Cove Recommended Boundary

Scale: 1" = 6,480"





31

M U D

Lynch Cove

Piles

U

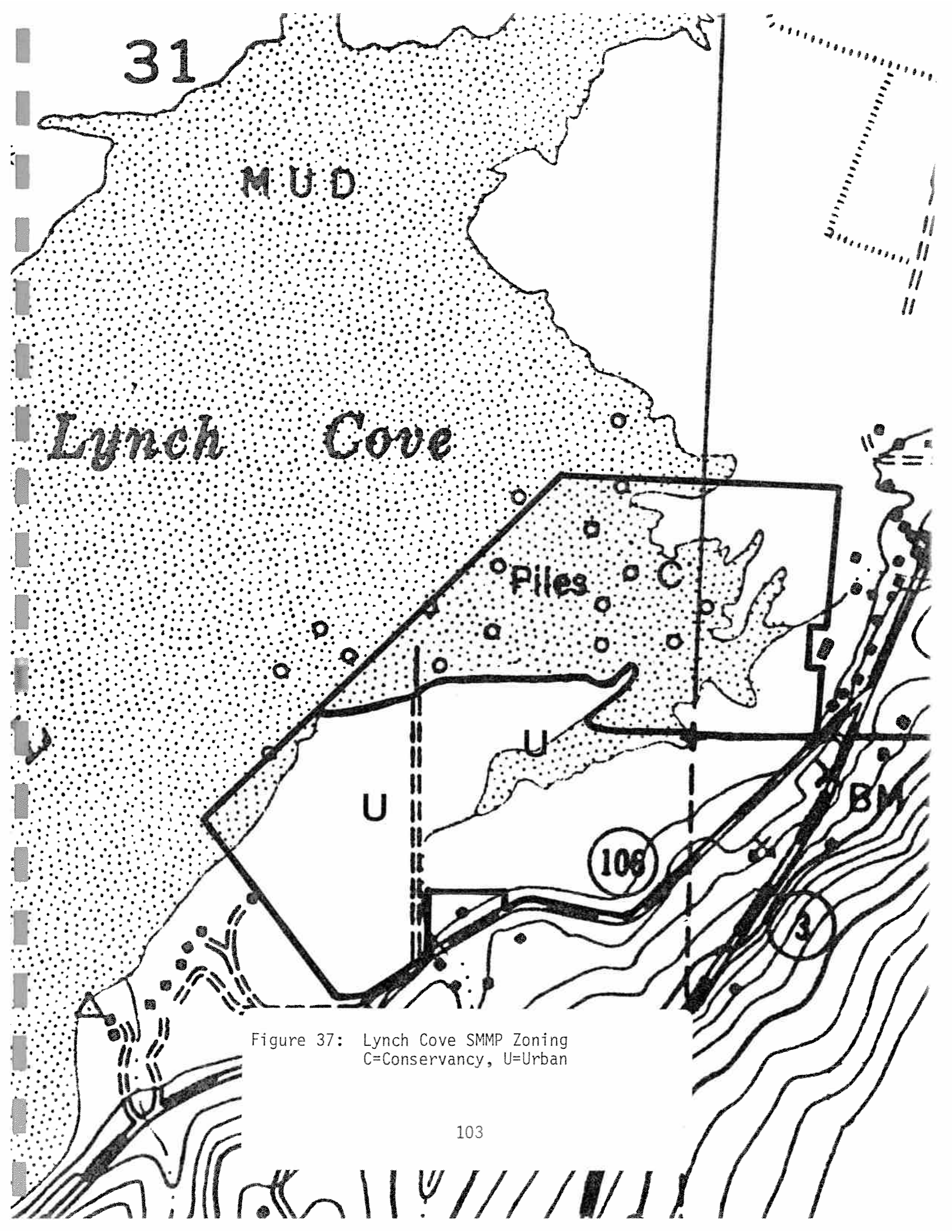
U

108

3

BM

Figure 37: Lynch Cove SMMP Zoning
C=Conservancy, U=Urban





NISQUALLY RIVER DELTA

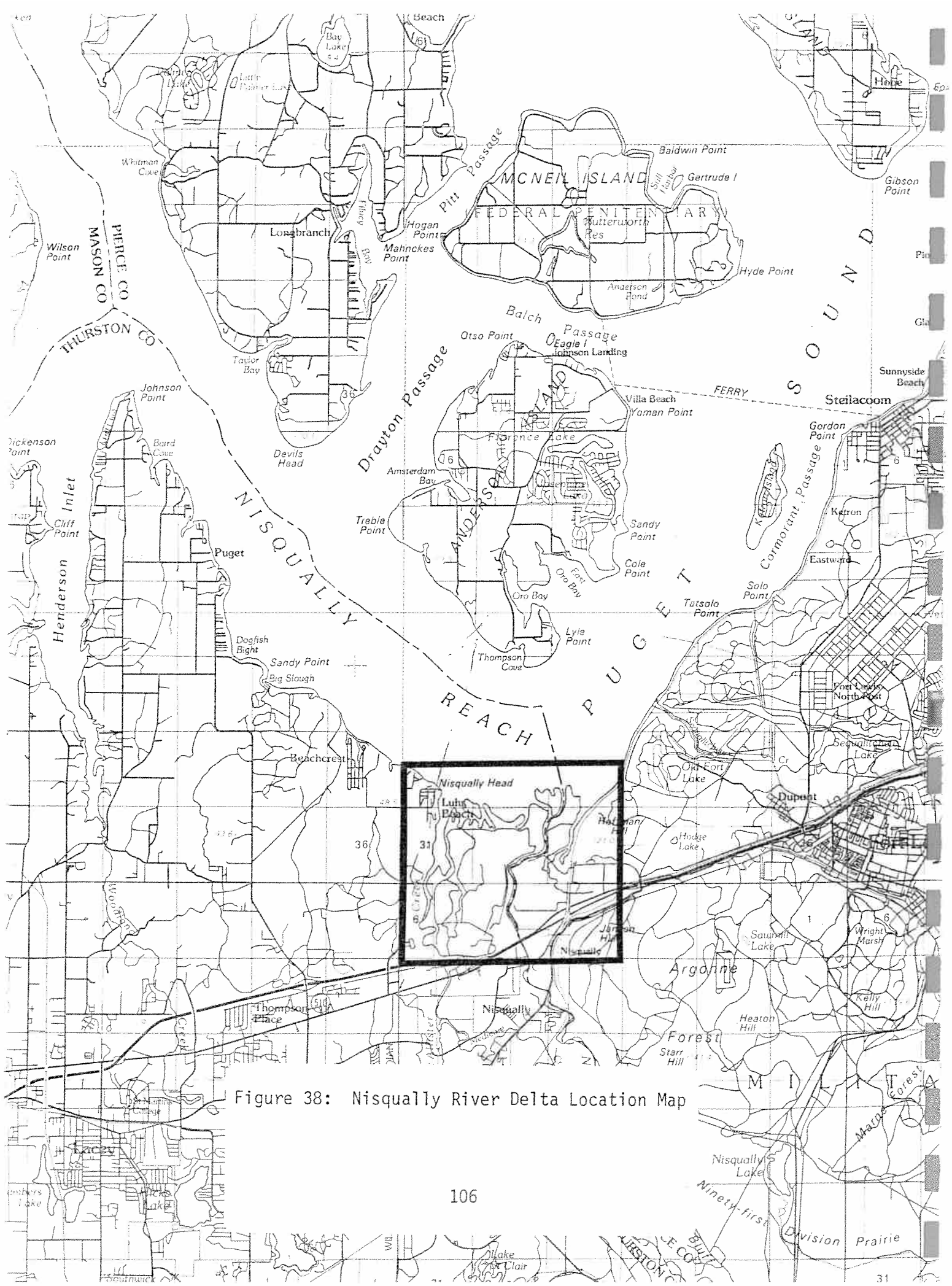


Figure 38: Nisqually River Delta Location Map

NISQUALLY DELTA

LOCATION:

Pierce and Thurston Counties; T18N, R1E, portions of sections 6, 38, and 39, and T19N, R1E, portions of sections 28, 29, 30, 31, 32, and 33. The proposed site is located at the mouth of the Nisqually River, north of Interstate 5 (figure 38).

SIZE:

The proposed site is approximately 2,082 acres.

PROPOSED BOUNDARY:

Except for three small inholdings, the proposed boundary only includes state and federally owned lands.

The proposed site includes the nondiked and undiked lower tidal reaches and deltas of McAllister Creek and the Nisqually River, the salt marsh, freshwater surge plain wetland, tideflats and some upland buffer (figure 39).

The tideflats are an integral part of the wetland and provide important habitat for wildlife, particularly shorebirds and bald eagles.

The bluff above McAllister Creek acts as a physical buffer for the wetlands and provides habitat for wildlife associated with the wetlands.

METHOD OF PROTECTION:

Tracts within the proposed site which are owned by the state, the federal government, or the Audubon Society are recommended for registration on the Washington Register of Natural Areas (see page 5). Other private inholdings are recommended for acquisition.

MANAGEMENT CONSIDERATIONS:

- 1) Topographic alteration (dredging, diking, filling, or soil movement) should not be allowed within the proposed boundary.
- 2) Biocides should not be used within the proposed boundary and, if possible, not on the adjacent dikes.
- 3) Native vegetation should not be removed or cut.

ZONING:

The Shoreline Management Master Program designation is **Natural** for that portion of the proposed site located in Thurston County. In Pierce County, the non-vegetated tideflats have no designation. Most of the vegetated wetlands in Pierce County are designated **Natural** with a small area of **Conservancy** (see glossary) (figure 40).

In the Thurston County Zoning Ordinance, there is no designation for the lowlands of the proposed site. A portion of the top of the bluff above McAllister Creek is zoned **Rural Residential** (figure 41).

The Pierce County Comprehensive Plan designation for the proposed site is **General Use** (figure 41).

The Thurston County **Rural Residential** designation allows 1 to 2 units per acre. The intent of the designation is to "enhance and preserve the rural agricultural character in areas where there is currently little development and which are characterized by; (a) a predominance of low-intensity uses; (b) physical limitations to development (i.e., limited water, soil characteristics or topography); (c) valuable natural resource potential (agriculture, forestry, mineral extraction); or (d) inability to be served efficiently for higher intensity development".

The Pierce County **General Use** designation is an interim classification in use until a more comprehensive zoning ordinance or plan can be developed. Its primary purpose is to "provide the minimum land-use controls necessary to protect the public safety, health, and general welfare in the relatively undeveloped portions of the county". Conditional use permits are required for some manufacturing and industrial uses. Unclassified permits are required for any uses which do not readily fit within the county's land use classification system.



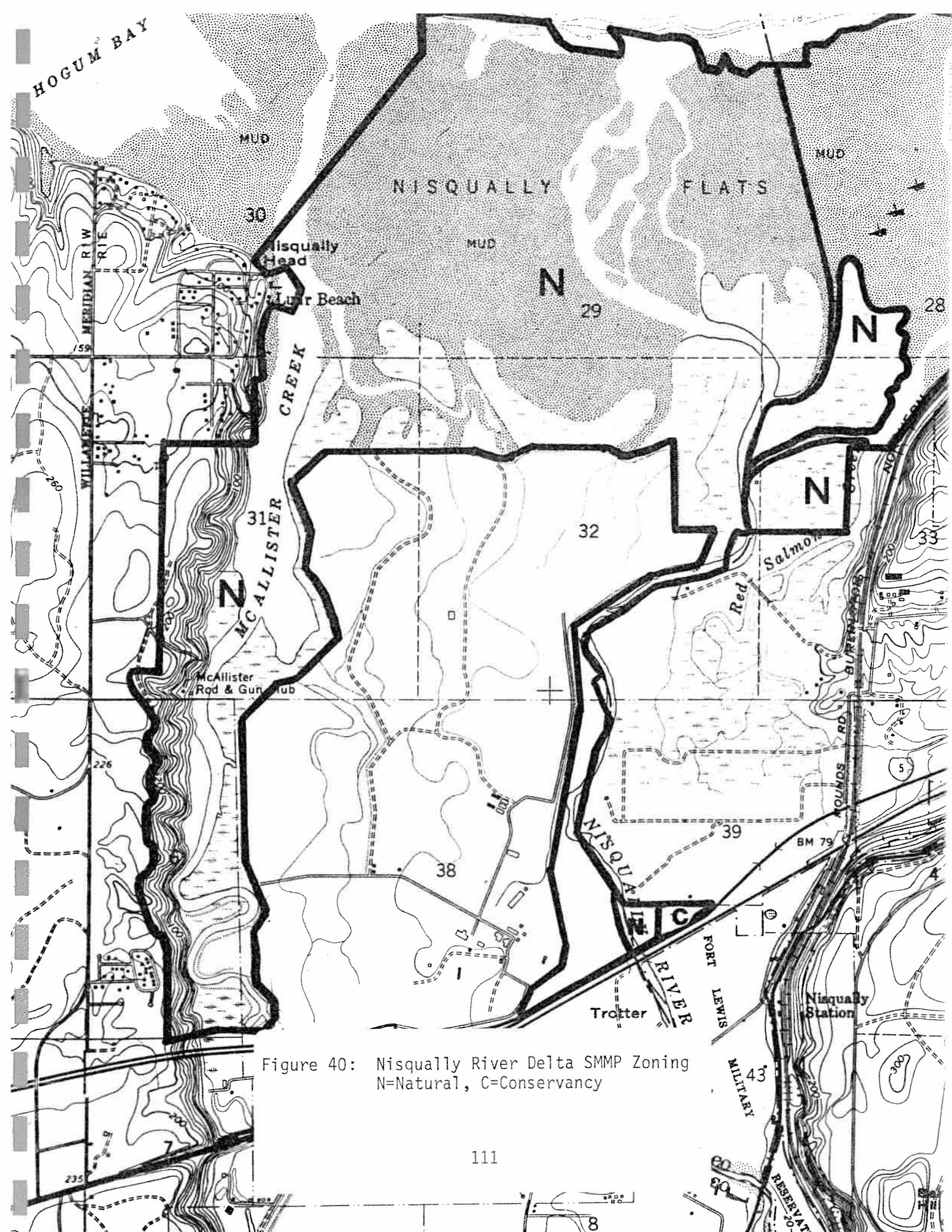
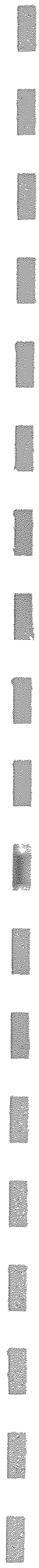


Figure 40: Nisqually River Delta SMMP Zoning
 N=Natural, C=Conservancy



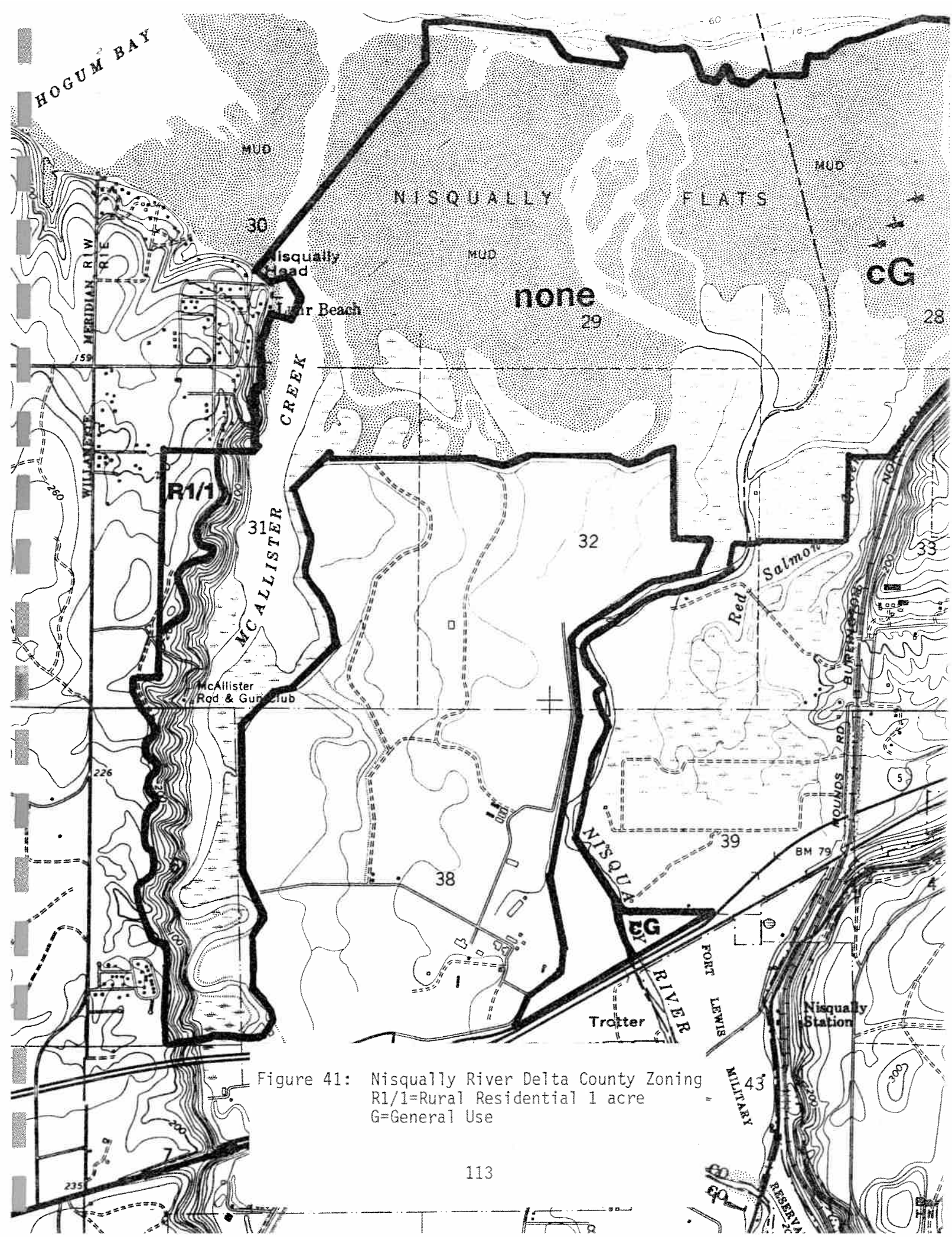


Figure 41: Nisqually River Delta County Zoning
 R1/1=Rural Residential 1 acre
 G=General Use



PEREGO'S LAGOON

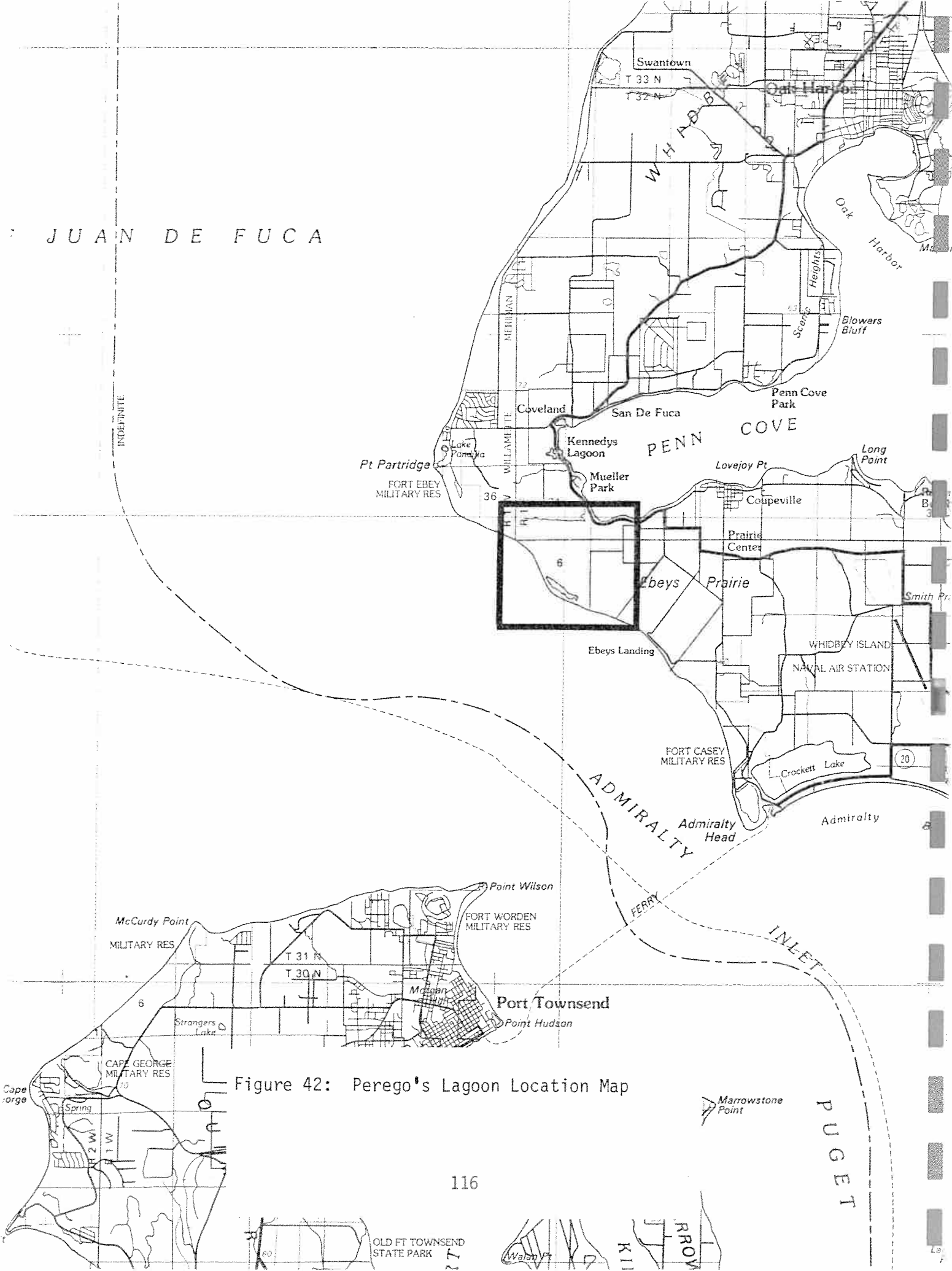
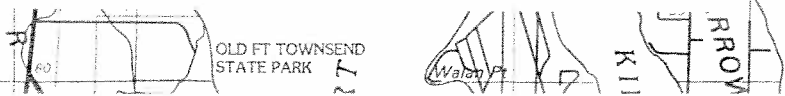


Figure 42: Perego's Lagoon Location Map



PEREGO'S LAGOON

LOCATION:

Island County; T31N, R1E, portions of sections 5 and 6. This site is located on the west side of Whidbey Island, between Admiralty Head and Point Partridge (figure 42).

SIZE:

The proposed site is approximately 118 acres.

PROPOSED BOUNDARY:

The proposed boundary includes all of Perego's Lake, its associated wetlands, and the spit which separates it from Admiralty Inlet. It also includes the steep bluff which rises up from the lagoon and a strip of land along the top of the bluff (figure 43). Inclusion of the bluff and land along the top of the bluff are important to help keep the bluff from eroding down into the lagoon.

METHOD OF PROTECTION:

State and federally owned parcels are recommended for registration on the Washington Register of Natural Areas (see page 5). Privately owned lands are recommended for acquisition.

MANAGEMENT CONSIDERATIONS:

- 1) Livestock should be excluded from the proposed site.
- 2) Foot trails should be restricted to one end of the lagoon and should not traverse the bluff slope above the lagoon.
- 3) Biocides should not be used within the proposed site.
- 4) Potential damage associated with human use should be monitored. If the lagoon, spit or wetlands are being degraded, remedial steps should be taken.
- 5) Camping and camp fires should be prohibited.
- 6) Development or road building should not be permitted. There should be no road access to the site.
- 7) Berm breaching or healing through natural processes should not be impeded.

ZONING:

The Shoreline Management Master Program designation for the proposed site is **Natural** (see glossary) (figure 44).

In the Island County Zoning Ordinance, the uplands within the proposed site are zoned **Rural Residential** (figure 45). Perego's Lagoon is zoned a **Valuable Wetland**.

Island County's **Rural Residential** designation is intended to limit density and land uses to provide a rural lifestyle, and to ensure that land uses are compatible. It places restrictions on the kinds of uses. It also sets the minimum tract size to 5 acres with 1 dwelling per 5 acres.

The **Valuable Wetland** designation is a temporary designation in place pending the revision of the county's Zoning Ordinance. The designation is intended to "preserve, improve, or protect" these wetlands. It requires maintenance of a 25 foot buffer and does not allow alteration of the wetland except through the county's permit process.

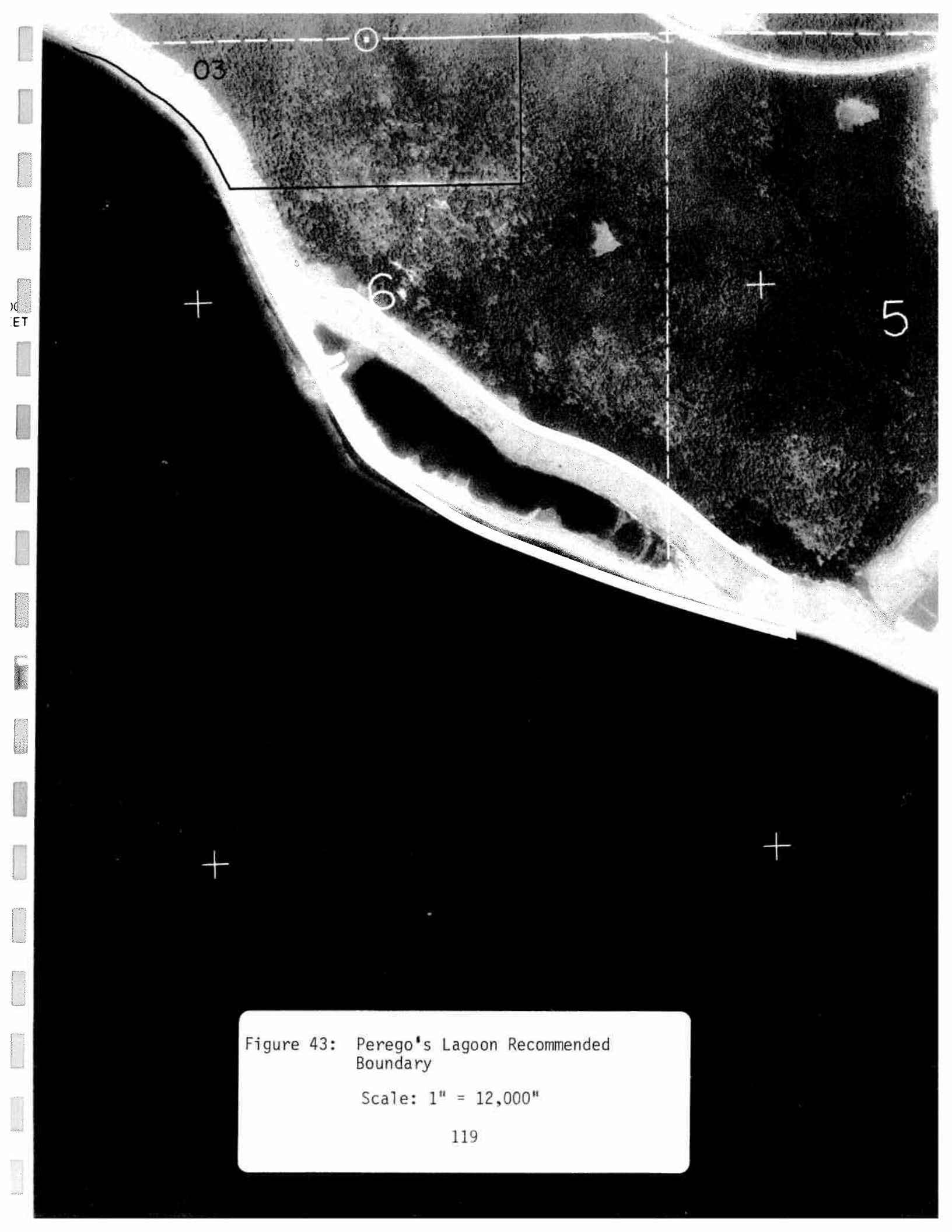


Figure 43: Perego's Lagoon Recommended Boundary

Scale: 1" = 12,000"

1000

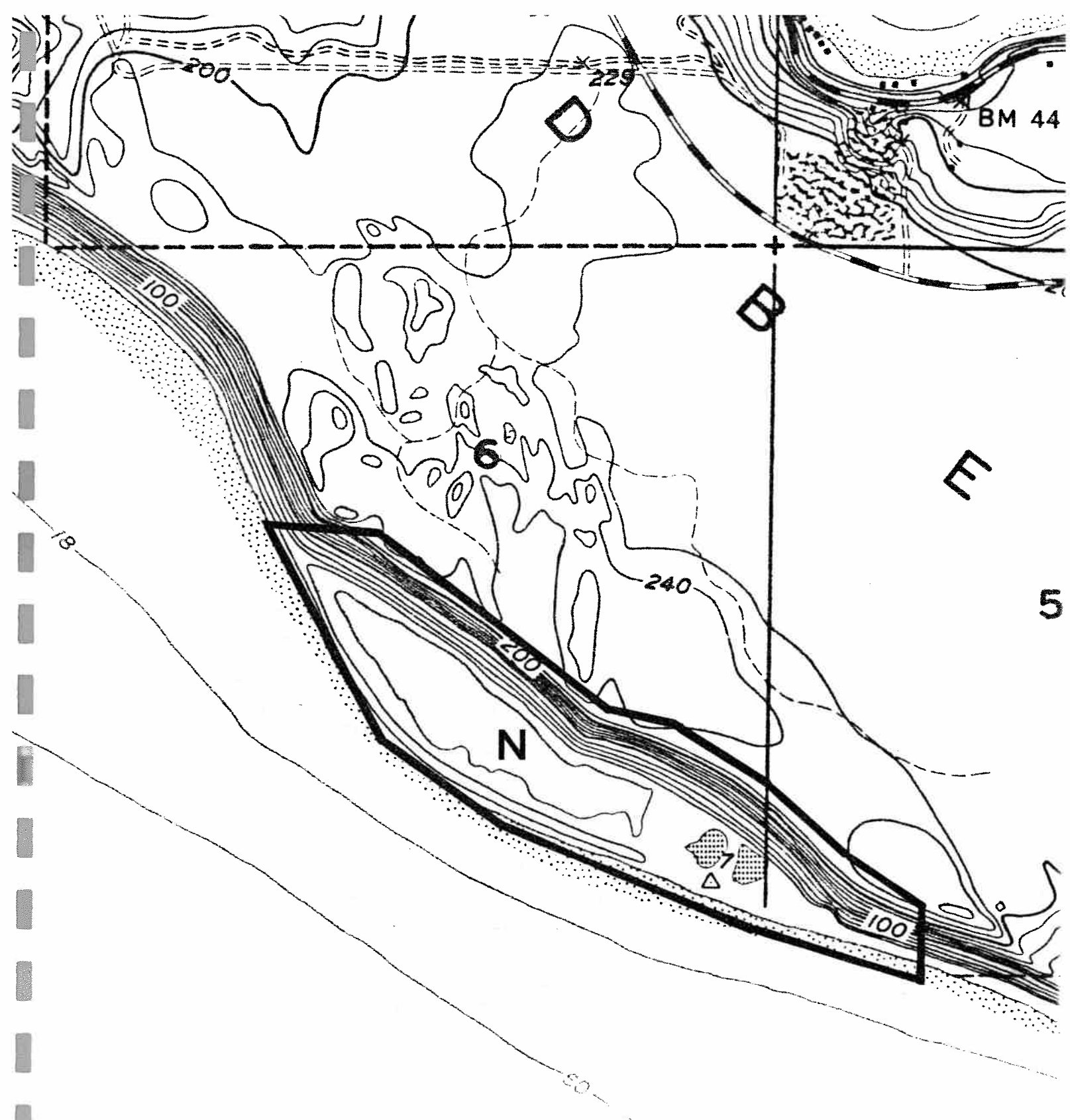
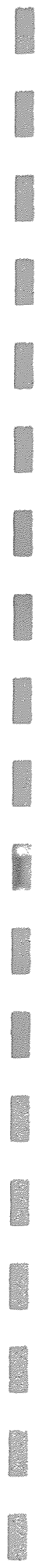


Figure 44: Perego's Lagoon SMMP Zoning
 N=Natural



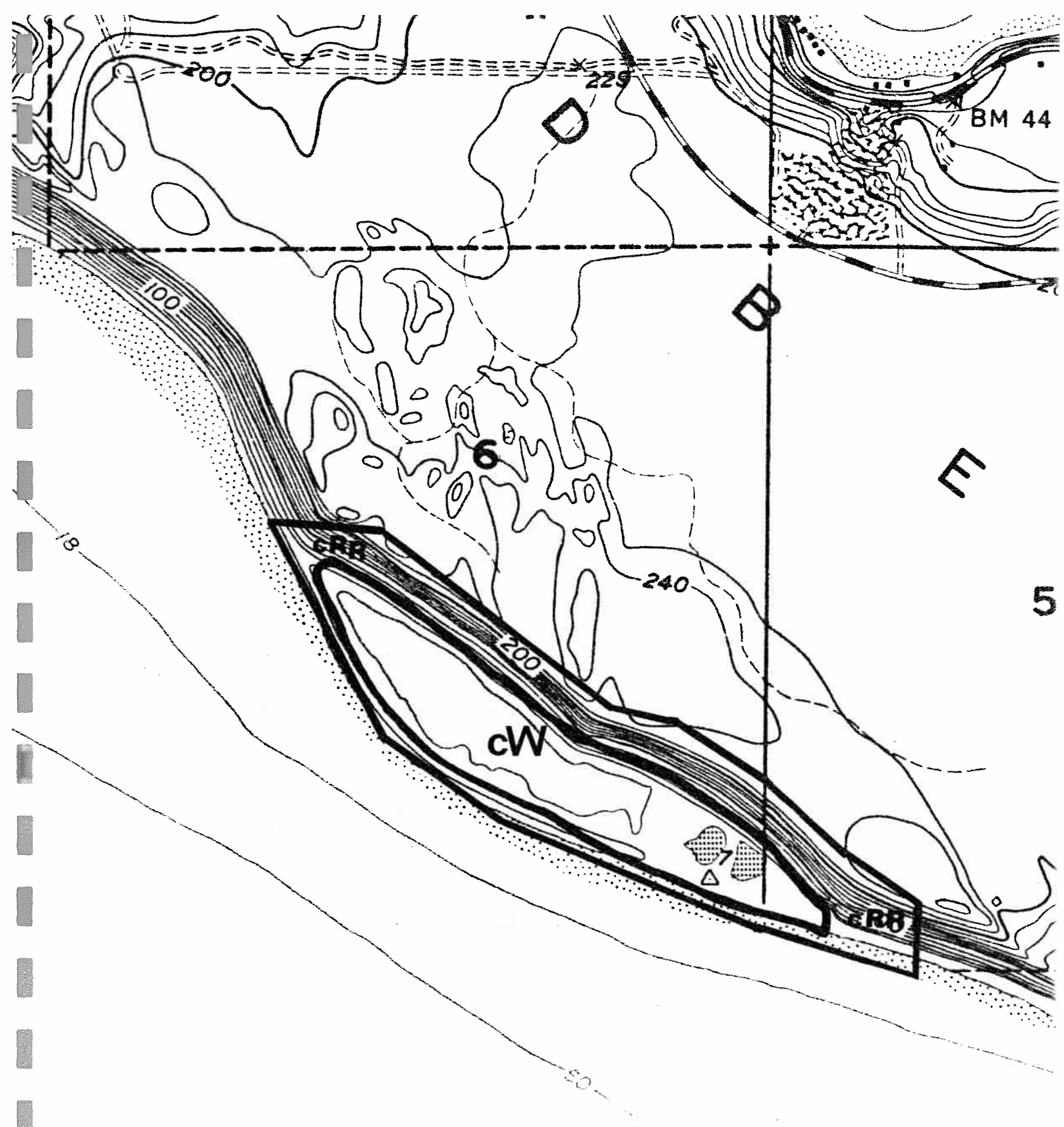
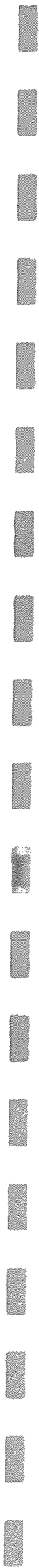


Figure 45: Perego's Lagoon County Zoning
 W=Valuable Wetland,
 RR=Rural Residential



SALT CREEK

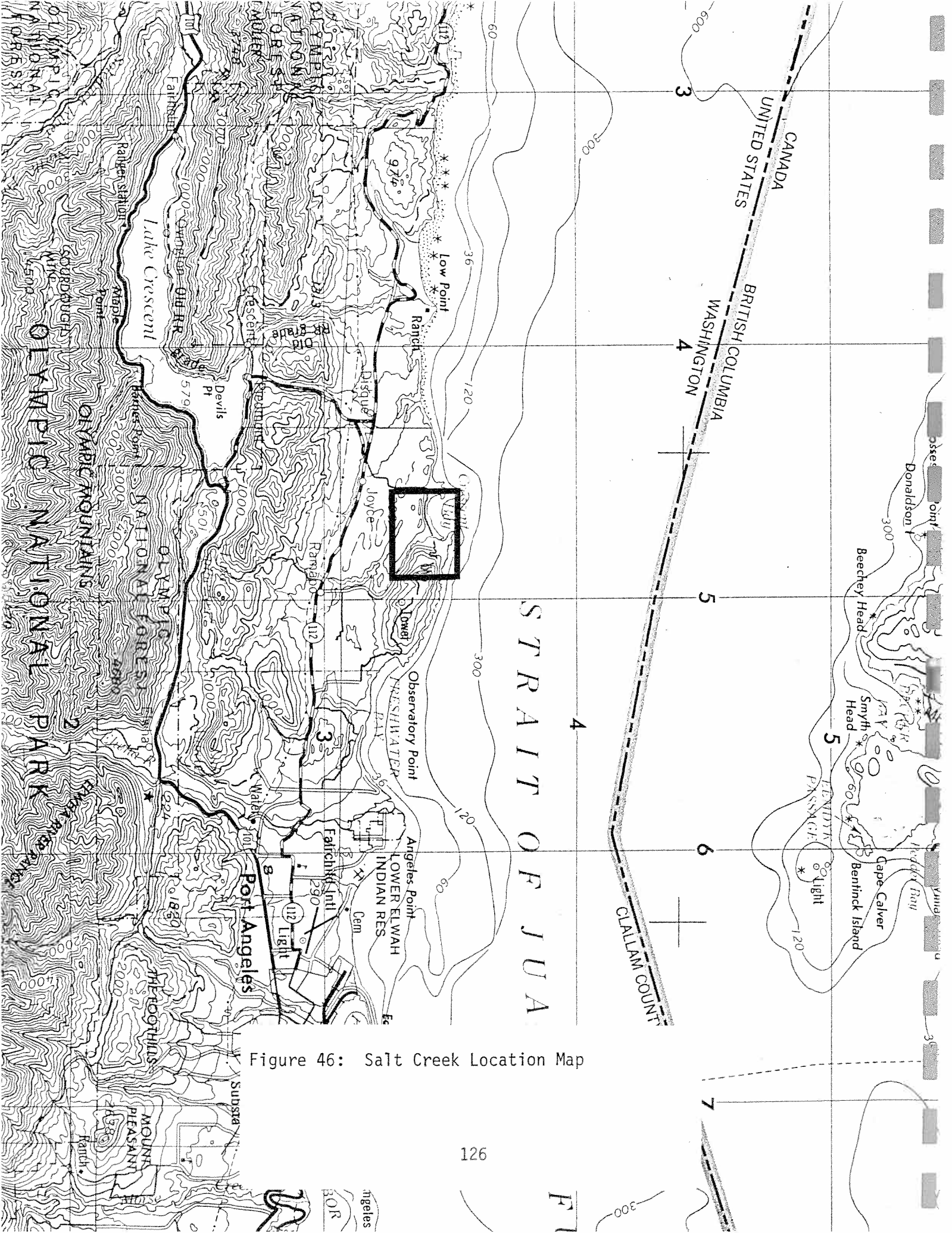


Figure 46: Salt Creek Location Map

SALT CREEK

LOCATION:

Clallam County; T31N, R8W, portions of sections 21, 27, and 28. The proposed site is located along the tidal reach of Salt Creek, south of Crescent Beach Road (figure 46).

SIZE:

The proposed site is approximately 89 acres.

PROPOSED BOUNDARY:

The proposed boundary includes all of the existing wetlands along the tidal reach of Salt Creek and lying south of Crescent Beach Road (figure 47). It includes almost no buffer because of adjacent land development.

The western portion of the proposed site, though not pristine, is recovering. Including it in the proposed boundary will reduce future management concerns.

METHOD OF PROTECTION:

This proposed site is recommended for either acquisition or protection by conservation easements.

MANAGEMENT CONSIDERATIONS:

- 1) Further development or road building should not be allowed within the proposed boundary.
- 2) Filling, ditching, diking, or other topographic alteration should be prohibited except as needed to maintain Crescent Bay Road or the private driveway.
- 3) Livestock should be excluded from the proposed site.
- 4) Cutting or removal of the native vegetation should not be allowed.
- 5) Removal of the existing private road and roadfill should be explored.
- 6) The wetland west of the private drive should be returned to its natural condition, as much as feasible. This should include developing drainage and tidal influence patterns which mimic natural conditions.

- 7) Water quality should be periodically monitored. If a problem exists, appropriate remedial action should be taken.
- 8) Biocides should not be used within the proposed boundary.

ZONING:

The Shoreline Management Master Program designates the proposed site **Natural** and **Rural** (see glossary) (figure 48).

The Clallam County Comprehensive Plan zones most of the proposed site as **Rural Residential 3**. The western portion of the proposed site is zoned **Recreational Commercial** (figure 49).

Clallam County's **Rural Residential 3** designation is intended to allow moderate density (1 unit per acre) residential development. It prohibits most commercial development.

The county's **Recreational Commercial** designation is intended to protect quality recreation sites from non-recreation land uses which threaten the public's use and enjoyment of the environment. This designation primarily allows the development of commercial facilities which provide services to recreationalists.



Figure 47: Salt Creek Recommended Boundary
Scale: 1" = 12,000"

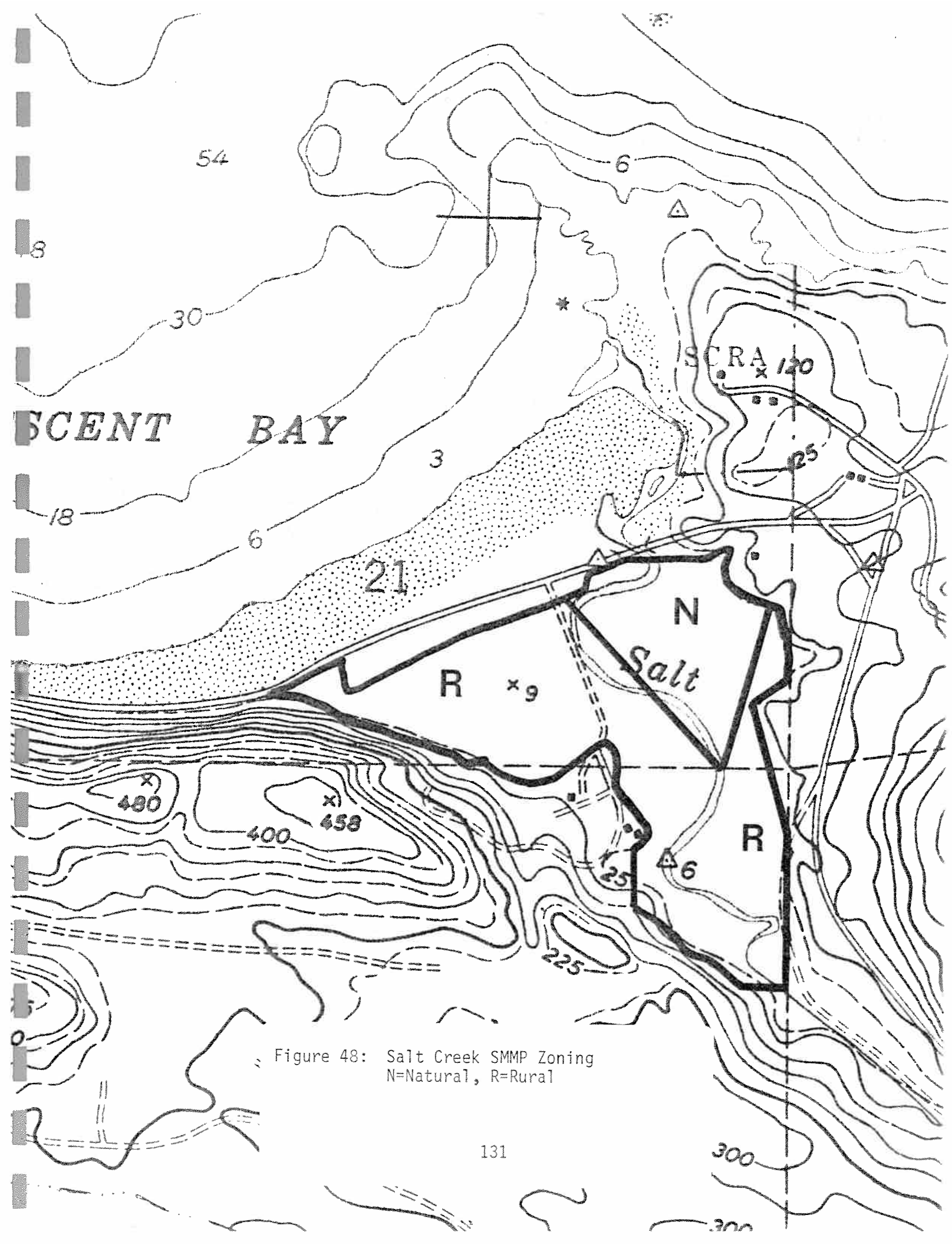
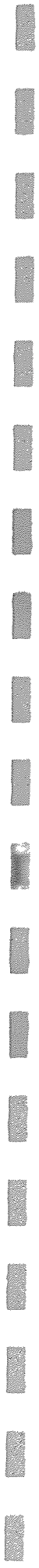


Figure 48: Salt Creek SMMP Zoning
 N=Natural, R=Rural



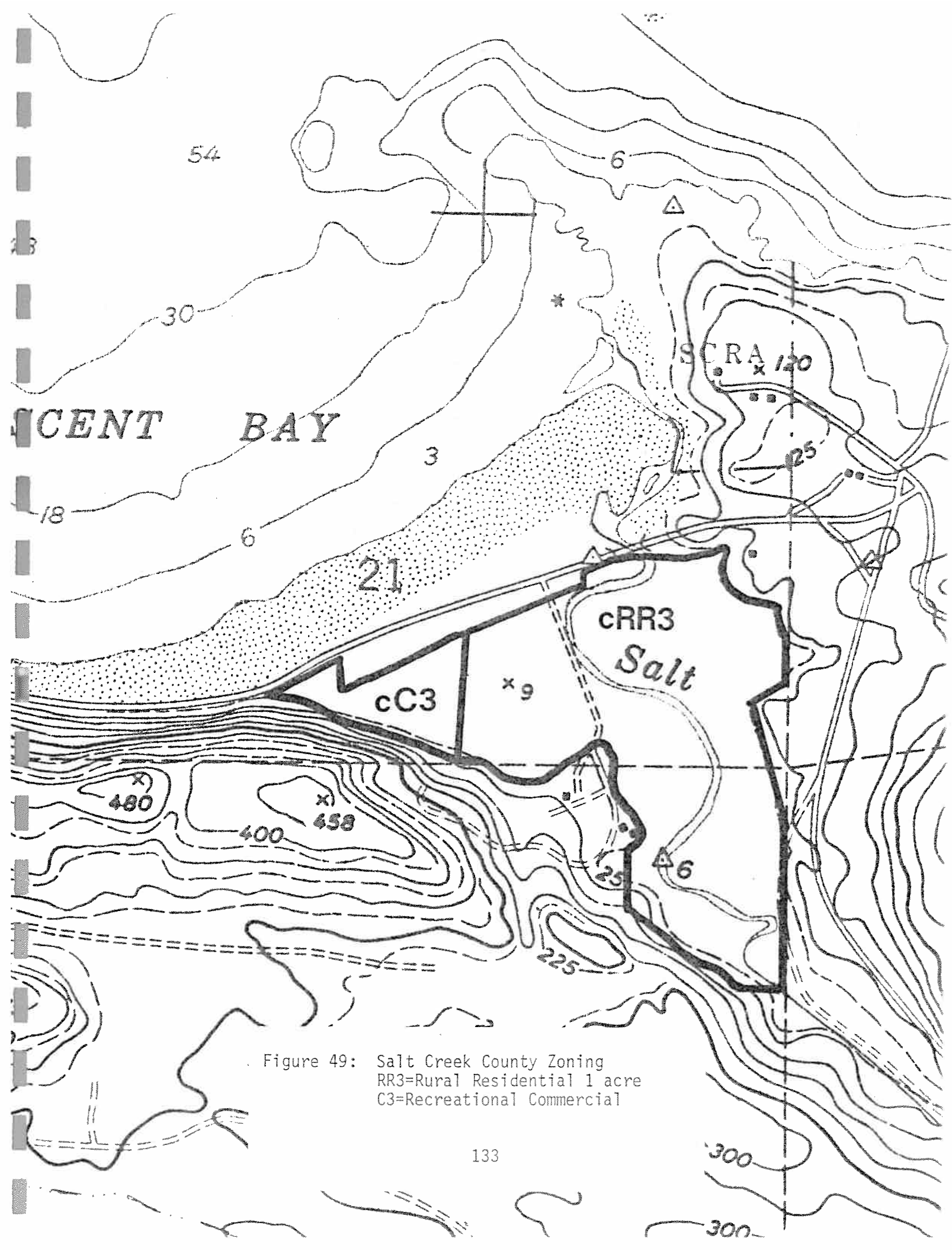


Figure 49: Salt Creek County Zoning
 RR3=Rural Residential 1 acre
 C3=Recreational Commercial



SKAGIT RIVER DELTA

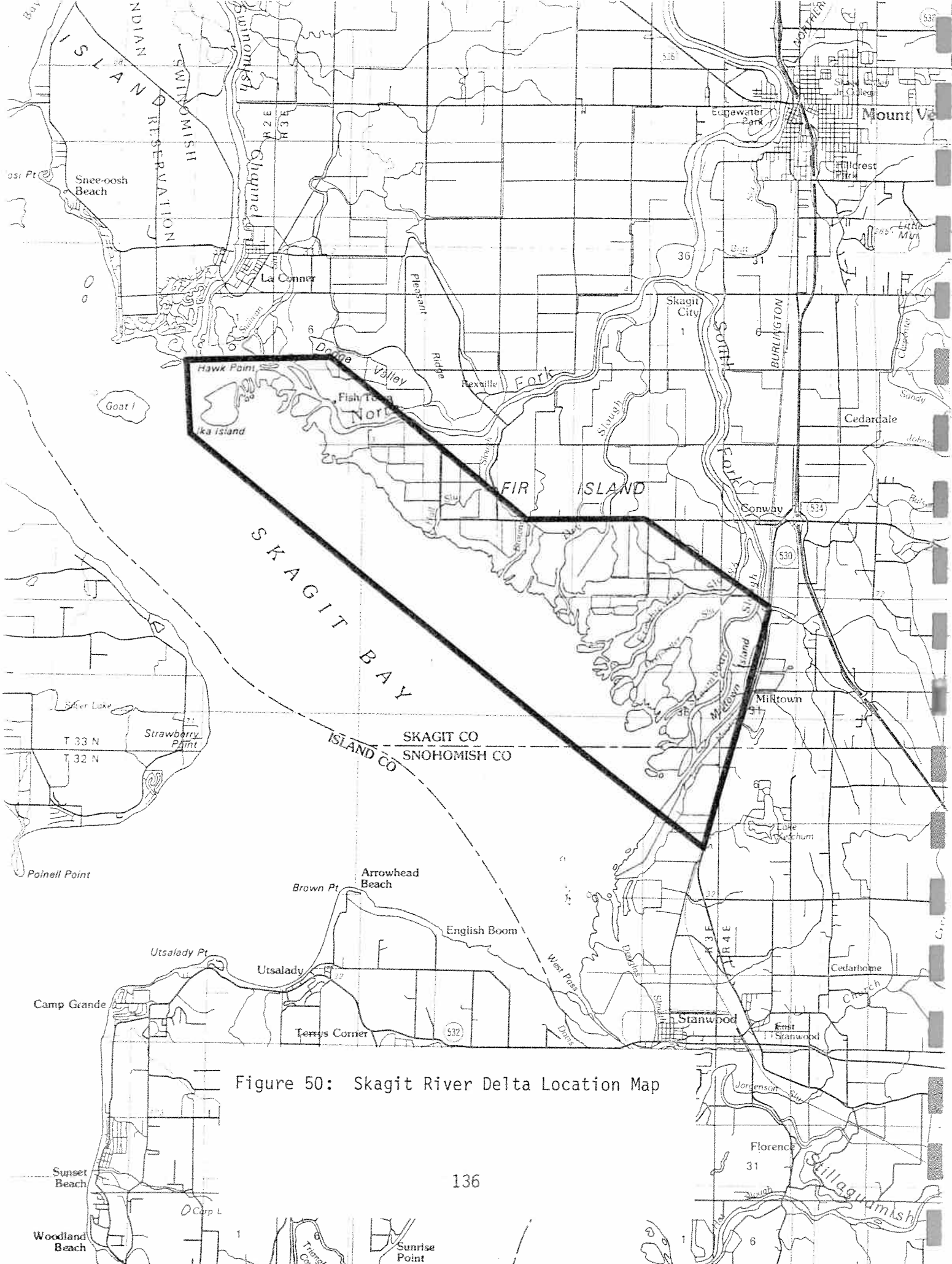


Figure 50: Skagit River Delta Location Map

SKAGIT RIVER DELTA

LOCATION:

Skagit and Snohomish Counties; T32N, R3E, portions of sections 1, 2, and 11; T33N, R2E, portions of section 12; T33N, R3E, portions of sections 6, 7, 8, 17, 18, 20, 21, 22, 25, 26, 27, 35, and 36: The proposed site is located on the Skagit River Delta between the North Fork Skagit River to the north and Tom Moore Slough to the south (figure 50).

SIZE:

The proposed site is approximately 4,160 acres.

PROPOSED BOUNDARY:

The proposed boundary mainly follows the waterward most dikes on the Skagit River delta. It includes most of the relatively undisturbed tidelands and surge plain marsh remaining on the delta. It also includes important habitat for raptors associated with the tidelands (figure 51).

The proposed boundary excludes all currently or previously diked lands with the exception of one dike which is perpendicular to the shore and which does not exclude tidal influence to lands on either side of it.

METHOD OF PROTECTION:

Publically owned lands are recommended for registration on the Washington Register of Natural Areas (see page 5). Privately owned lands are recommended for acquisition.

MANAGEMENT CONSIDERATIONS:

- 1) There should be not further diking, ditching, filling, or other topographic alteration within the proposed boundary.
- 2) There should be no alteration or harvesting of the native vegetation.
- 3) Livestock should be excluded from the proposed site.
- 4) If populations of exotic species of cordgrass (Spartina spp.) become established, measures should be taken to control or eradicate them.

- 5) Biocides should not be used within the proposed boundary*.
- 6) There should be no further development or road building.

ZONING:

The Shoreline Management Master Program designation is **Conservancy** for the portion of the proposed site located in Snohomish County. In Skagit County, the tideflats and some of the salt marsh are designated **Aquatic**. Ika Island is designated **Natural**. Most of the salt marsh north of Freshwater Slough is designated **Rural**. The marsh south of Freshwater Slough is designated **Conservancy** (see glossary) (figure 52).

The portion of the proposed site which lies within Snohomish County has no county zoning. Snohomish County does not zone tidelands.

The portion of the proposed site which lies within Skagit County is zoned by the county as **Public Use** except Ika Island which is zoned **Rural 5** (figure 53). It is not clear how far out the **Public Use** zoning extends. It probably only extends to the seaward limit of the salt marsh. Tidelands beyond this zone are not zoned.

Skagit County's **Public Use** designation is intended to "allow for common public uses where the need arises and uses will not create a nuisance or interfere with existing uses". The feasibility for land to be given this designation and the permitted uses are determined on a case by case basis. The designation given to the Skagit Habitat Management Area is intended to keep the area in its present condition.

Skagit County's **Rural** designation is intended to "provide for low density development and to preserve the open space character of the land in those areas that are not considered as major resource areas (agriculture, timber), but are so situated that they provide limited agricultural/timber resource values". This zoning allows "single family dwellings; agricultural crops; pasture and grazing; tree farms; and cultivation, management and harvest of any forest crops".

The **Rural 5** designation limits development density to 1 dwelling per 5 acres.

* Application of biocides to non-native Spartina spp., using proven methods, should be treated as the sole exception.

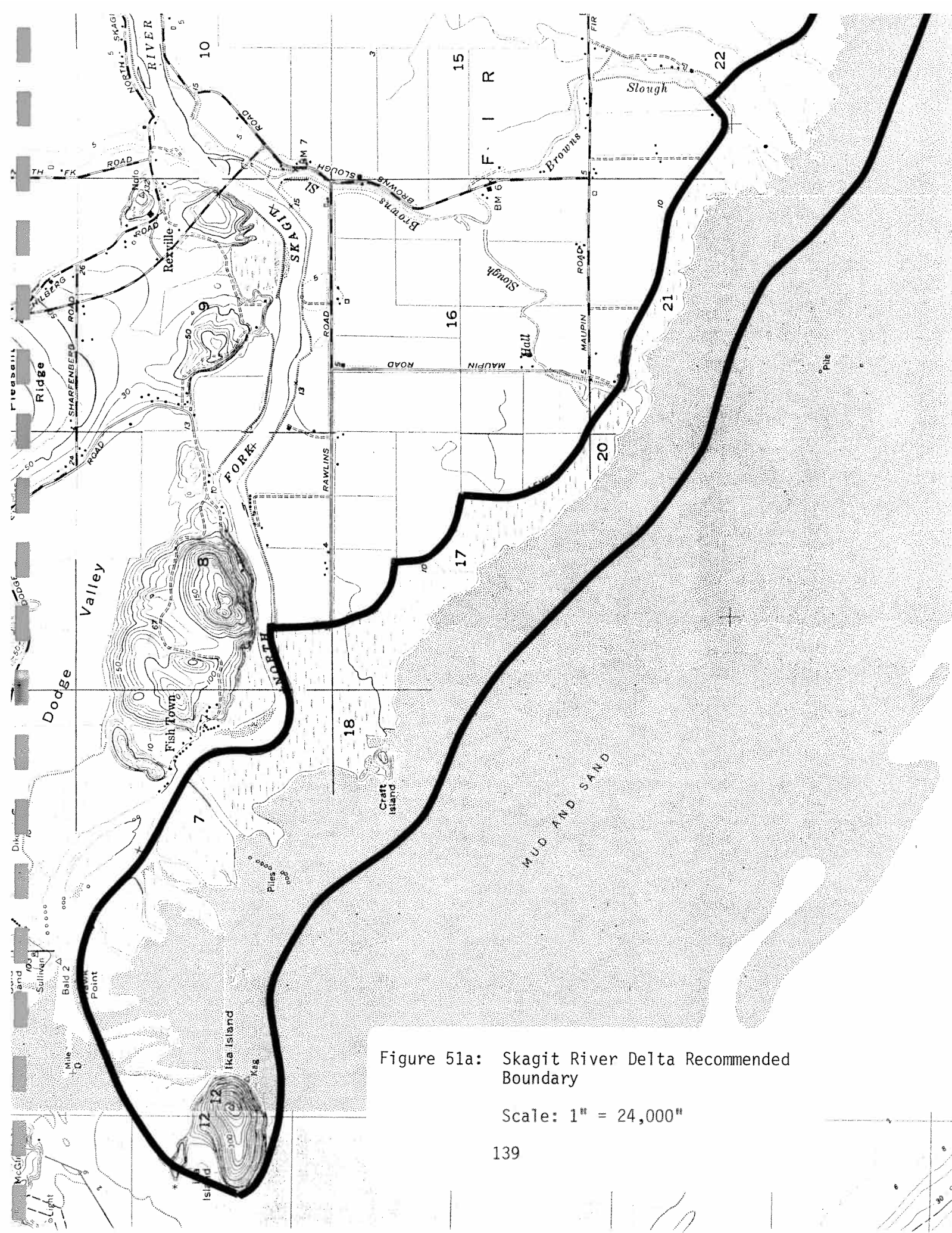


Figure 51a: Skagit River Delta Recommended Boundary

Scale: 1" = 24,000"



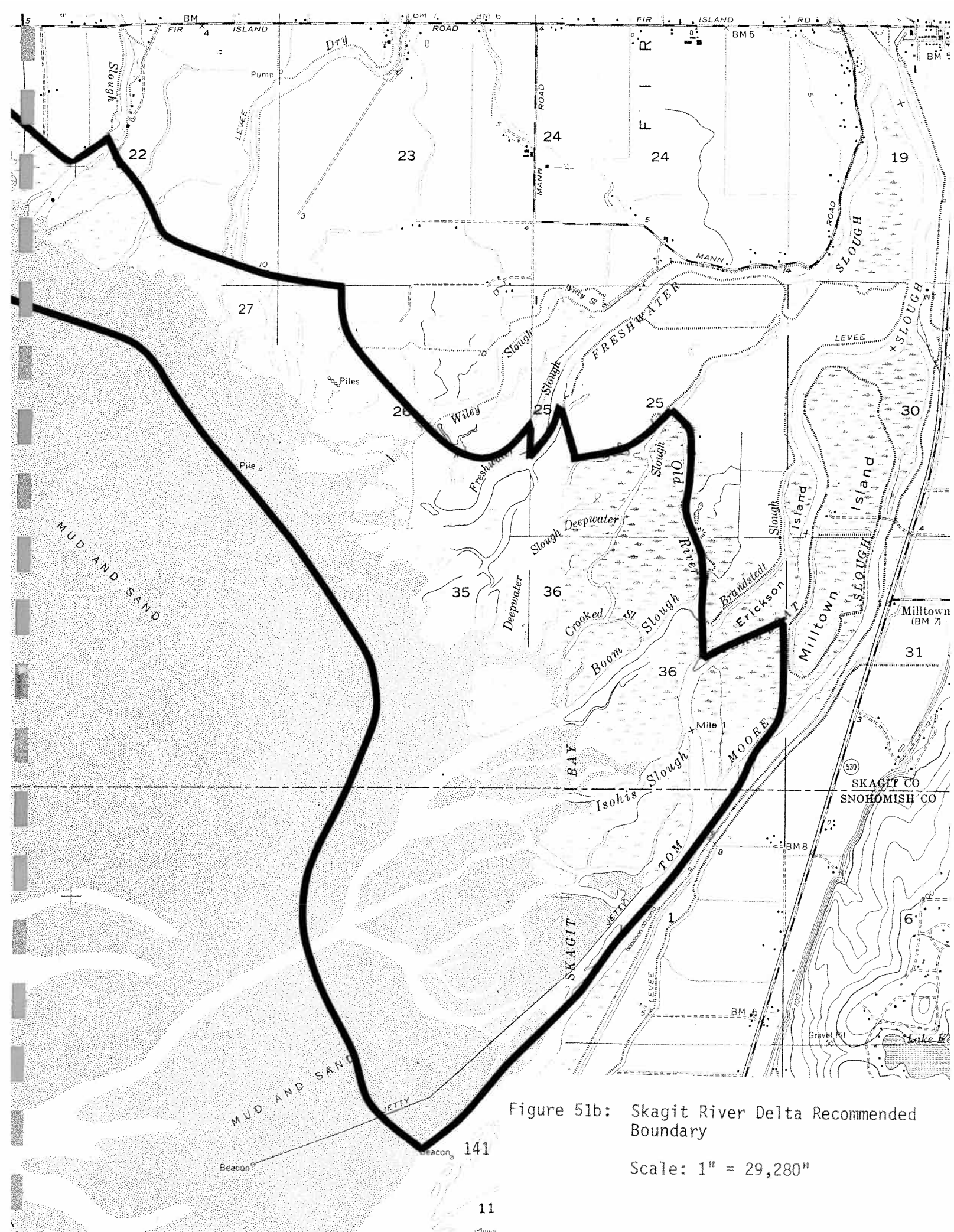
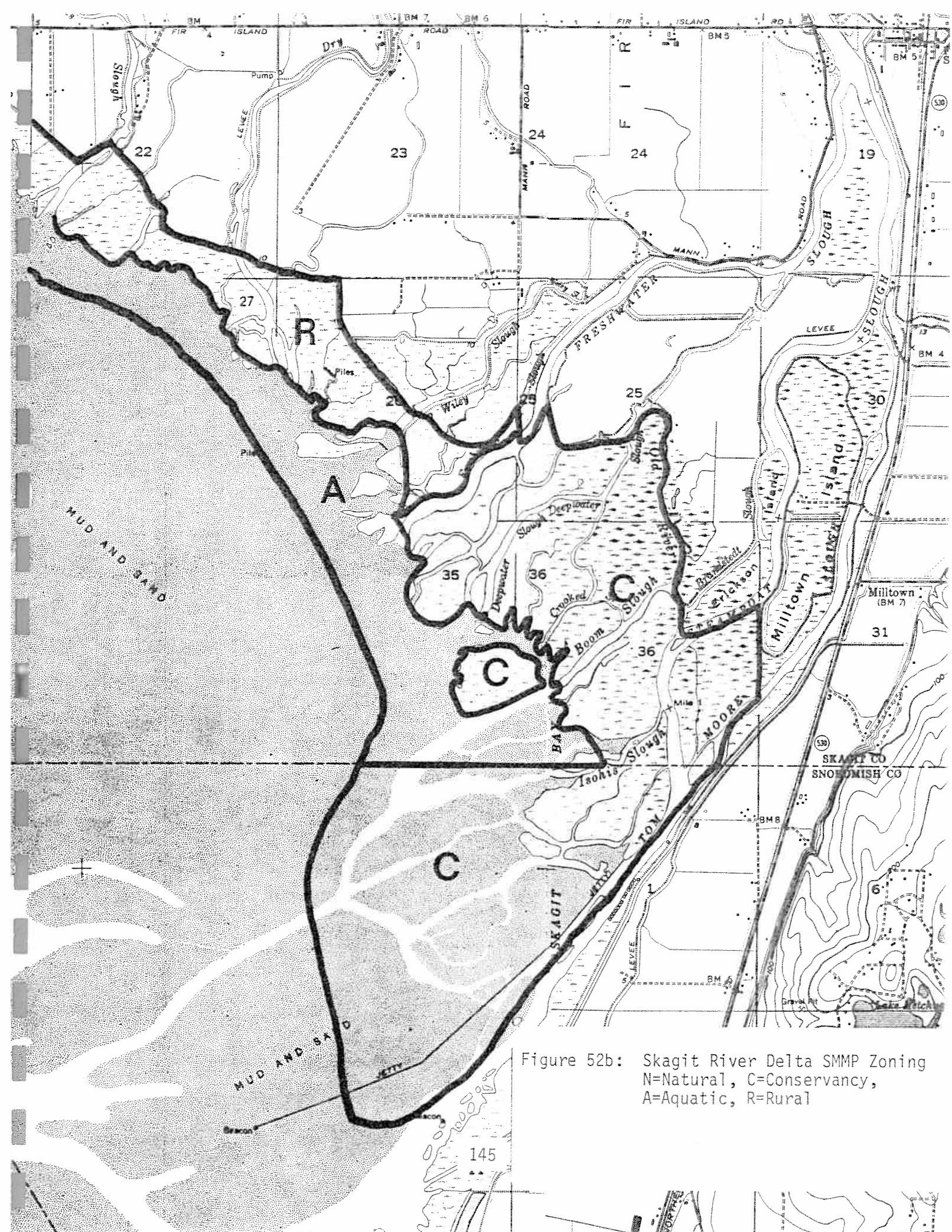


Figure 51b: Skagit River Delta Recommended Boundary

Scale: 1" = 29,280"









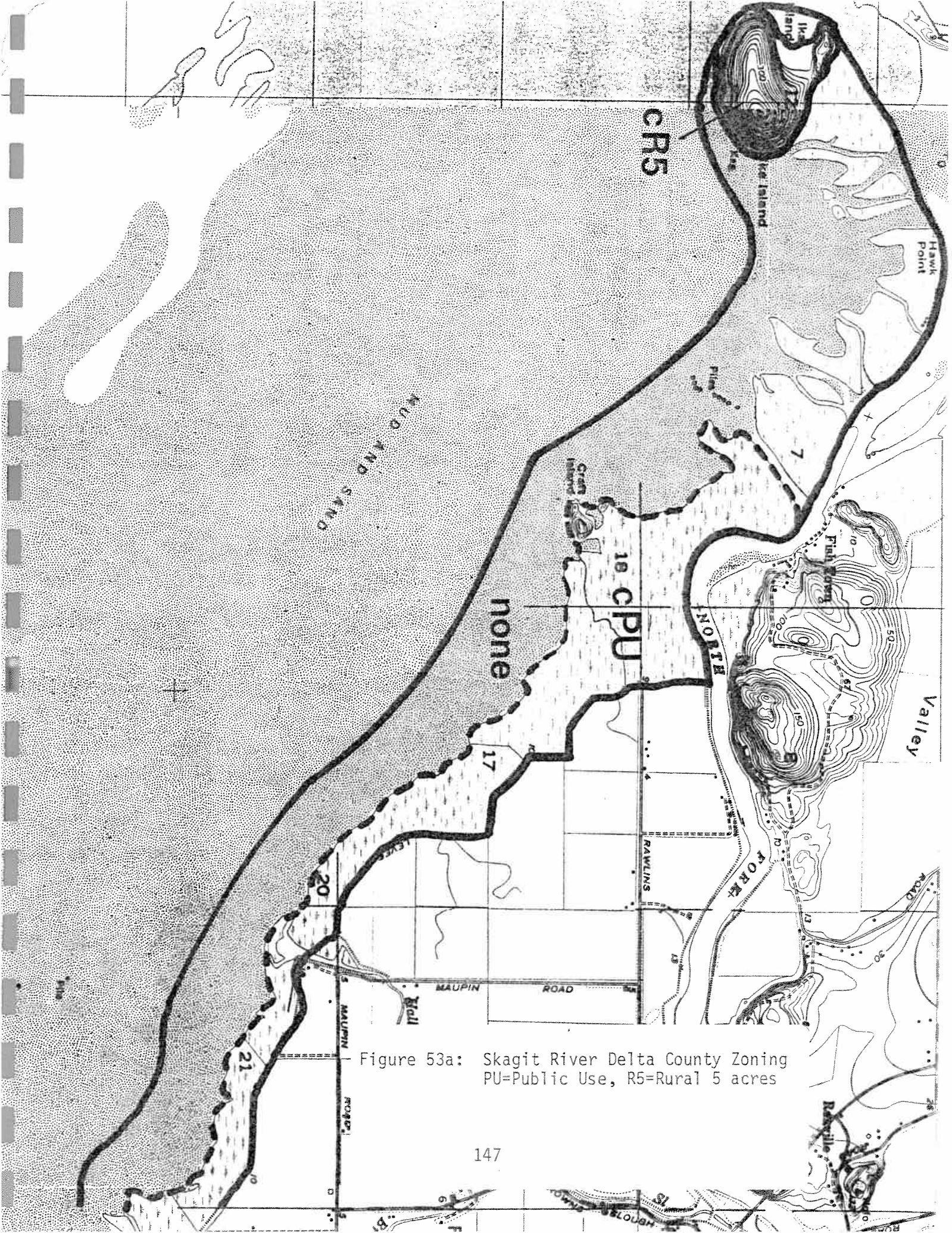


Figure 53a: Skagit River Delta County Zoning
 PU=Public Use, R5=Rural 5 acres



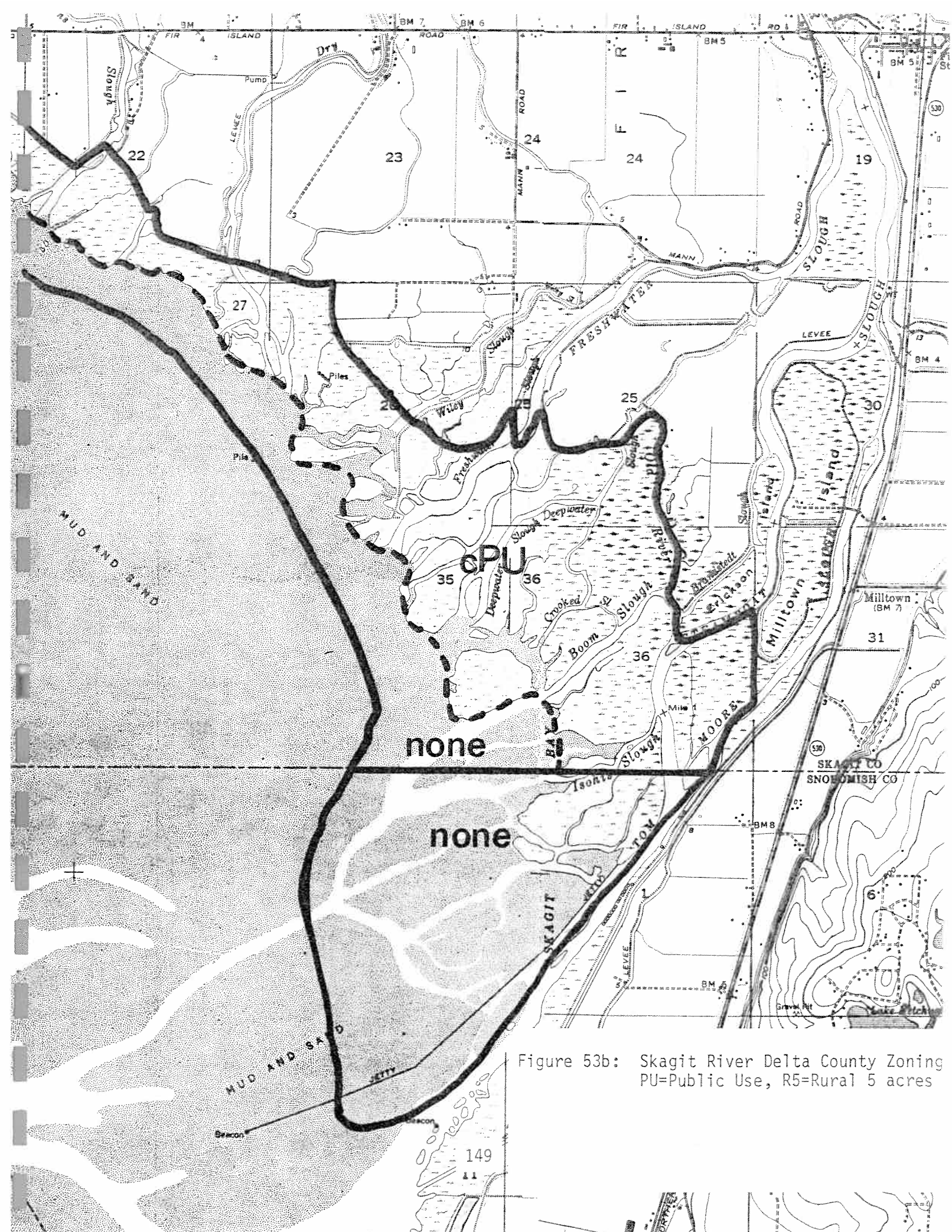


Figure 53b: Skagit River Delta County Zoning
 PU=Public Use, R5=Rural 5 acres



SKOOKUM INLET

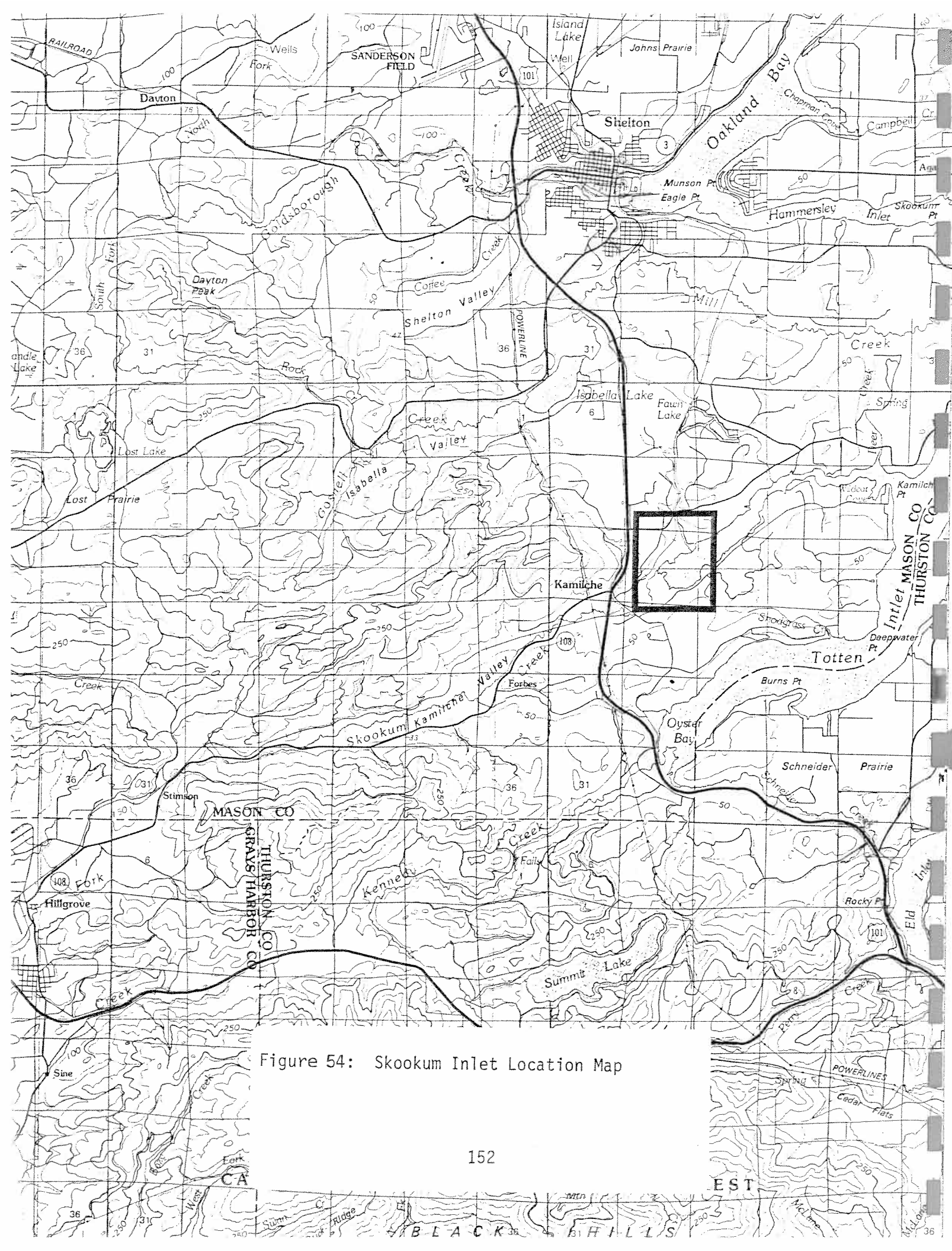


Figure 54: Skookum Inlet Location Map

SKOOKUM INLET

LOCATION:

Mason County; T19N, R3W, portions of section 17. The proposed site is located along the northern shore at the head of Skookum Inlet about 8.5 miles south of Shelton (figure 54).

SIZE:

The proposed site is approximately 84 acres.

PROPOSED BOUNDARY:

The proposed boundary includes the high quality salt marsh, adjacent tidelands, and an upland buffer (figure 55).

The tidelands and uplands provide a physical buffer for the wetlands. They also provide habitat for wildlife associated with the wetlands. The uplands provide an additional visual buffer and help protect freshwater quality and flow into the wetland.

METHOD OF PROTECTION:

The proposed site is recommended for acquisition and inclusion in the Washington State Natural Area Preserve System.

MANAGEMENT CONSIDERATIONS:

- 1) Road building and development should not be allowed within the proposed boundary.
- 2) Logging and alteration of the native vegetation should be avoided.
- 3) There should be no topographic alteration (diking, ditching, filling, channeling, or soil movement).
- 4) Biocides should not be used within the proposed boundary.
- 5) Recreational use should be discouraged.
- 6) Water quality and flow should be checked occasionally. If a problem develops, appropriate remedial action should be taken.

ZONING:

The Shoreline Management Master Program designation for the proposed site is Rural (see glossary) (figure 56).

A Mason County Comprehensive Plan has not been published.



Figure 55: Skookum Inlet Recommended Boundary

Scale: 1" = 12,000"



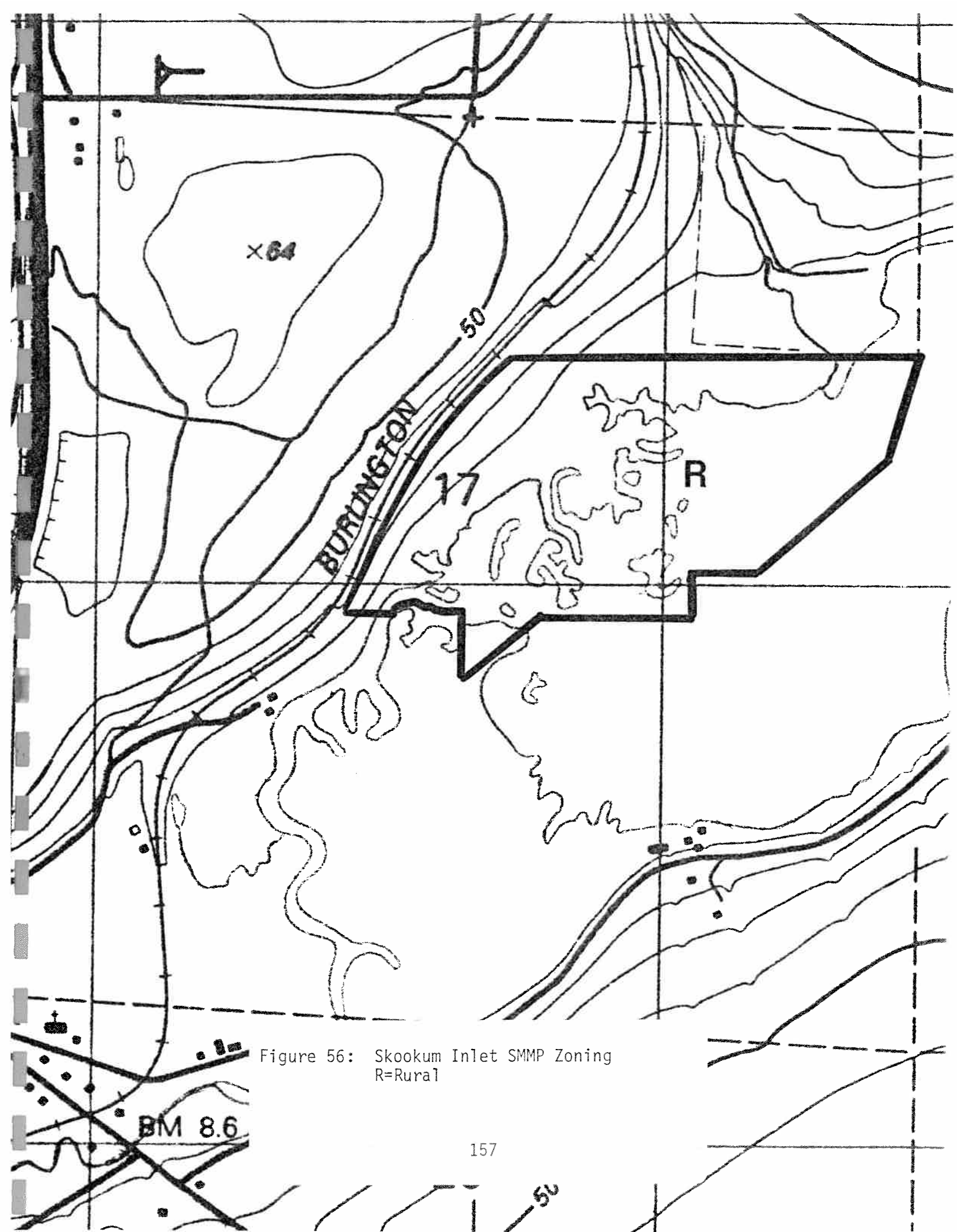


Figure 56: Skookum Inlet SMMP Zoning
R=Rural



STAVIS BAY

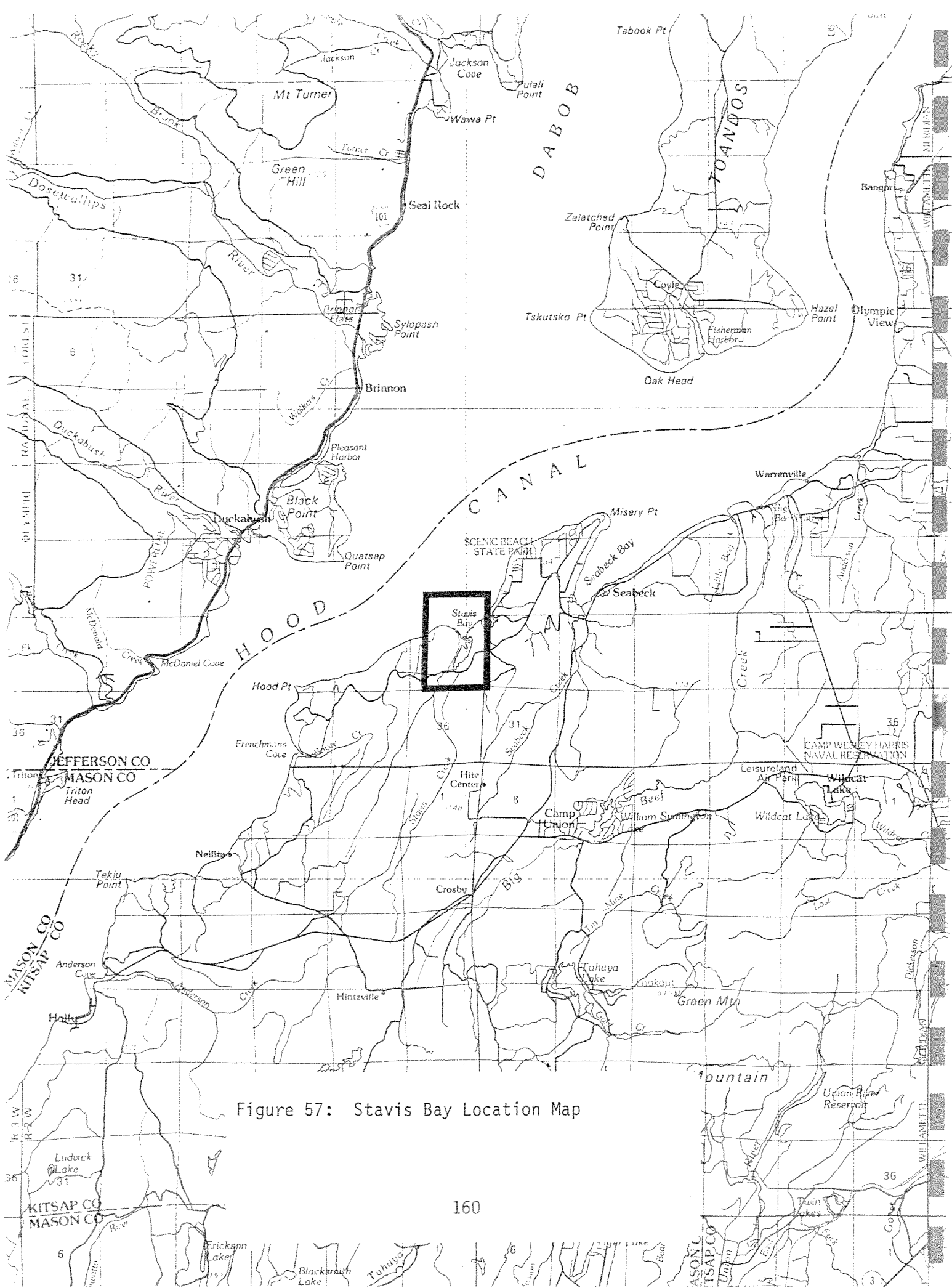


Figure 57: Stavis Bay Location Map

STAVIS BAY

LOCATION:

Kitsap County; T25N, R2W, portions of section 25. The proposed site is located on the west side of the Kitsap Peninsula, approximately 2 miles southwest of the town of Seabeck (figure 57).

SIZE:

The proposed site is approximately 125 acres.

PROPOSED BOUNDARY:

The proposed boundary includes all of Stavis Bay; the salt marsh, tideflats, spits, and eel grass beds. It also includes some of the tidelands which lie outside the mouth of Stavis Bay, and an upland buffer (figure 58).

The tideflats outside of Stavis Bay are included to help protect the hydrologic processes which have produced and maintain the spits. The tideflats also act as an extension of the bay ecosystem providing habitat for herring and juvenile fish. The tideflats contain eel grass beds.

A large upland buffer is included within the proposed boundary to buffer the wetland system from human use and adjacent development. It includes a steep unstable slope which lies west of the bay, to protect against possible siltation of the bay. The buffer also provides habitat for wildlife associated with the wetland, and protects water quality.

METHOD OF PROTECTION:

The proposed site is recommended for acquisition. If acquisition is not possible, conservation easements are recommended.

MANAGEMENT CONSIDERATIONS:

- 1) There should be no further road building or development.
- 2) Removal or cutting of native vegetation should not be allowed.
- 3) Motorized and non-motorized vehicles should be prohibited on the spits and beach.
- 4) Biocides should not be used within the proposed boundary.
- 5) Parties, fires, and camping should be prohibited.

- 6) Dredging, filling, diking, or other topographic alteration should not be allowed on the spits, beach, and tidelands.
- 7) Docks and boat moorage facilities should not be developed within the proposed boundary.

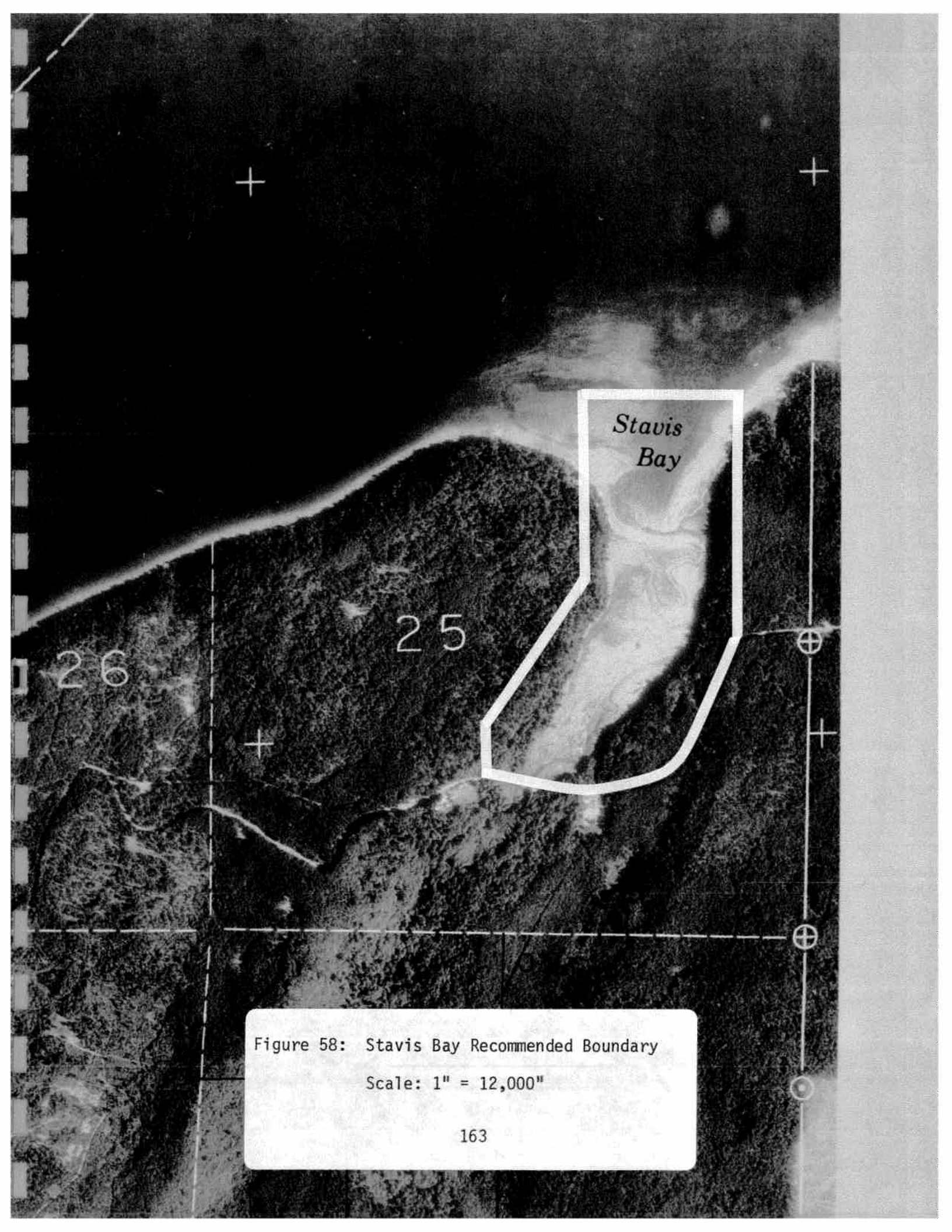
ZONING:

The Shoreline Management Master Program designation is **Natural** for the wetlands and spits contained within the proposed site boundary. The uplands are designated **Rural** (see glossary) (figure 59).

In the Kitsap County Zoning Ordinance, most of the proposed site is zoned **Rural 2WF** except a small portion of upland which is zoned **Rural 2.5** (figure 60).

Kitsap County's **Rural 2WF** zoning is applied to waterfront property in Rural Residential areas. It allows a maximum density of 2 dwelling units per acre.

The Kitsap County **Rural 2.5** zoning is a Rural Residential classification which allows 1 dwelling unit per 2.5 acres.



*Stavis
Bay*

26

25

Figure 58: Stavis Bay Recommended Boundary

Scale: 1" = 12,000"

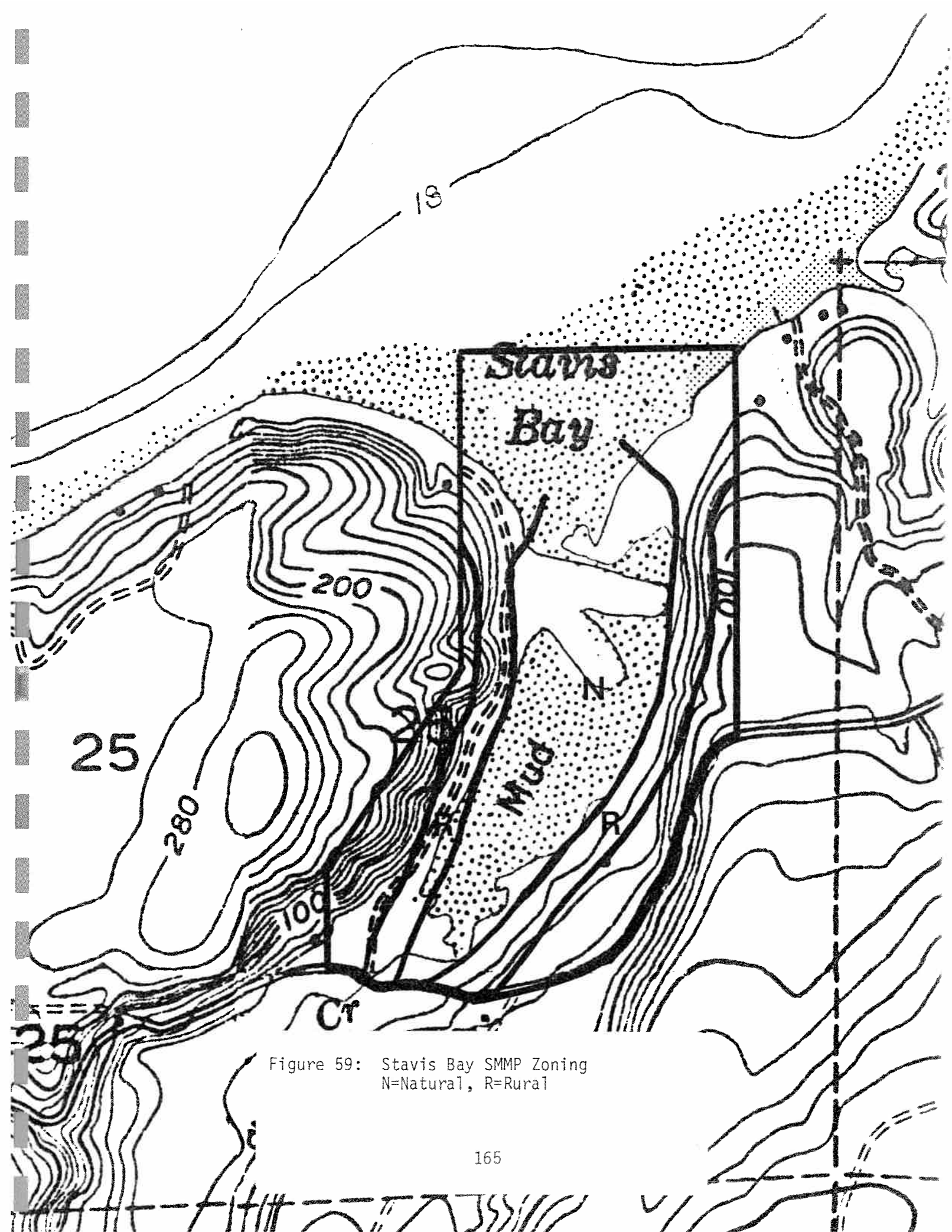


Figure 59: Stavis Bay SMMZ Zoning
N=Natural, R=Rural



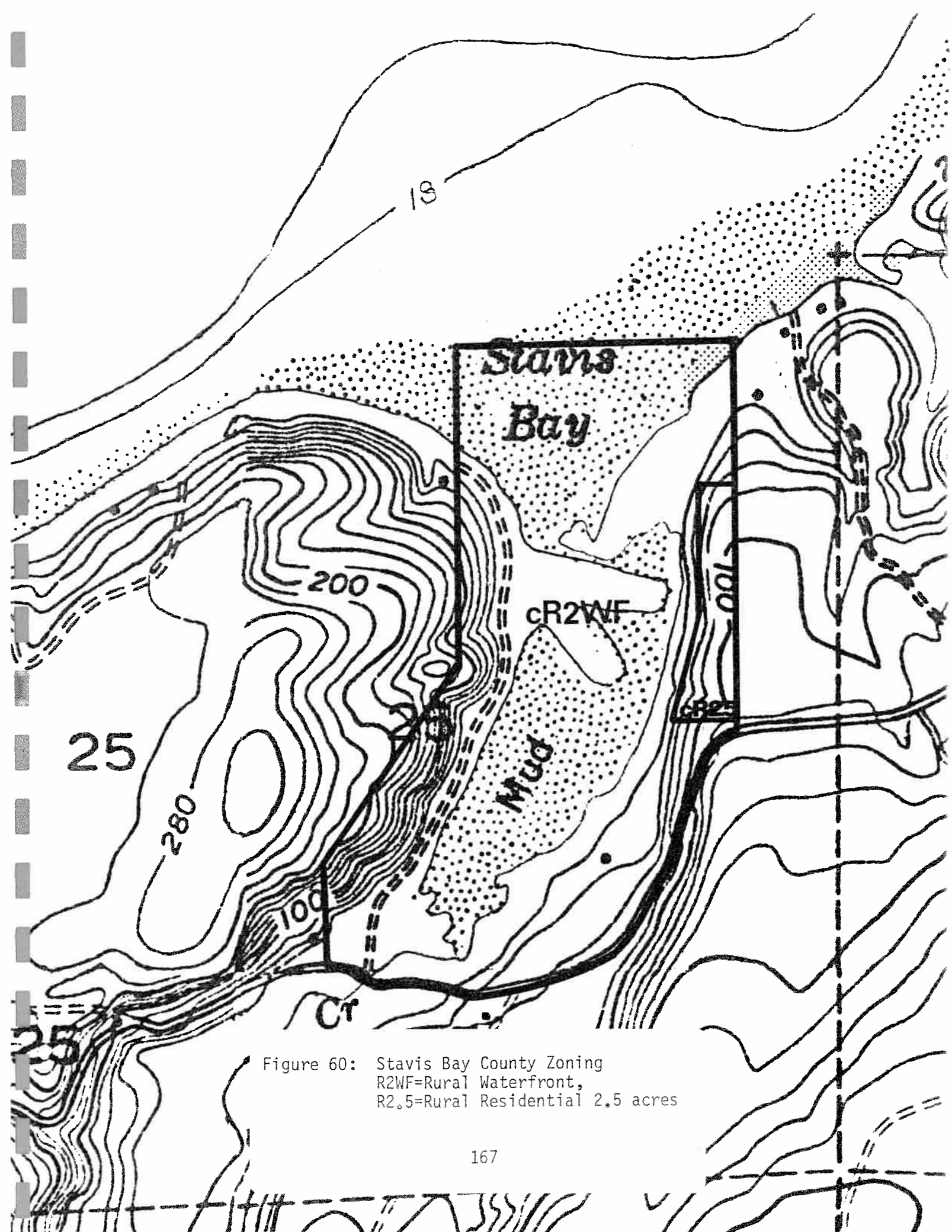


Figure 60: Stavis Bay County Zoning
 R2WF=Rural Waterfront,
 R2.5=Rural Residential 2.5 acres



TARBOO BAY

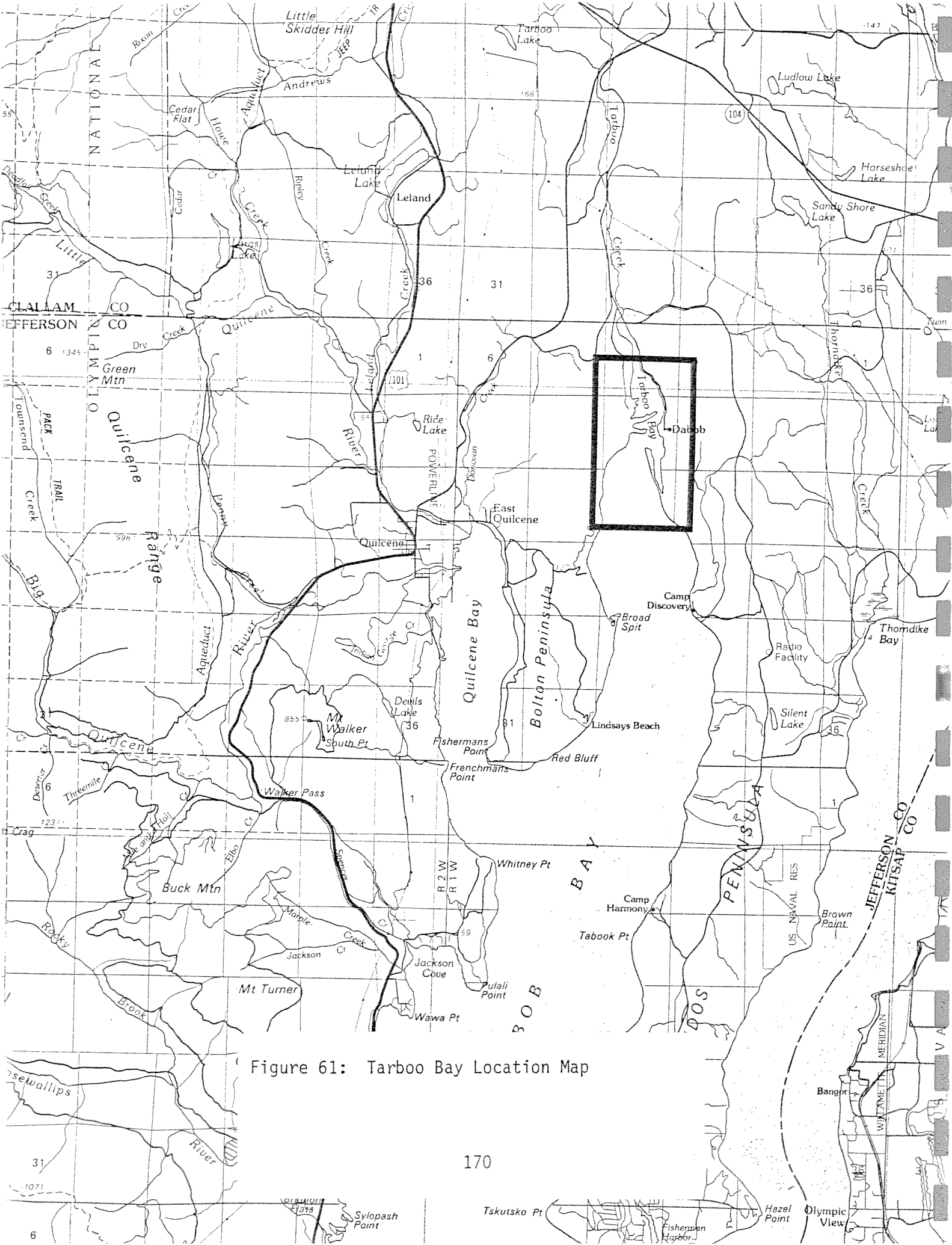


Figure 61: Tarboo Bay Location Map

Sylopass Point

Tskusko Pt, Fisherman Harbor, Hazel Point, Olympic View

TARBOO BAY

LOCATION:

Jefferson County; T27N, R1W, portions of sections 9 and 16. The proposed site is located at the north end of Dabob Bay near the town of Dabob (figure 61).

SIZE:

The proposed site is approximately 284 acres.

PROPOSED BOUNDARY:

The proposed boundary encompasses several spits in Tarboo Bay and includes the surrounding salt marsh, some of the tidelands, and an upland buffer (figure 62).

The tidelands and uplands act as a buffer for the spits and marsh. The uplands provide a physical and visual buffer as well as habitat for wildlife associated with the wetlands and spits. The tidelands provide a physical buffer plus wildlife habitat.

METHOD OF PROTECTION:

The spits, salt marsh, upland buffer, and a small area of tideflats are recommended for acquisition. The remainder of the tideflats are recommended for conservation easements. The proposed site is recommended for inclusion in the Washington Natural Area Preserve System.

MANAGEMENT CONSIDERATIONS:

- 1) There should be no further road building or development within the proposed boundary.
- 2) Motorized and non-motorized vehicles should be prohibited.
- 3) Domesticated animals should be prohibited.
- 4) Topographic alteration (diking, ditching, filling, or soil movement) should not be allowed.
- 5) Biocides should not be used within the proposed boundary.
- 6) Recreational use should be discouraged.
- 7) Logging and other alteration of native vegetation should be avoided.

ZONING:

The proposed site is zoned **Conservancy** in the Shoreline Management Master Program (see glossary) (figure 63).

The proposed site is designated **Rural** and a **Resource Production** area in the Jefferson County Comprehensive Plan (figure 64).

The **Rural** designation in Jefferson County is intended for "low to medium intensity development normally served by individual wells and septic tanks, although some small, "neighborhood" community water systems will be developed.

Roads and other public services will remain rural in character consistent with the minimum standards for health and safety. Densities of new residential developments will range from large acreage tracts up to one (1) dwelling unit per gross acre for some individual projects."

The **Resource Production** designation is intended for "low intensity development such as forest lands. Uses will focus around forest management, farming, watershed management, gravel and peat extraction, low intensity residential, and similar activities. Residential and recreational development should be complimentary with the production capability on adjacent lands.

These areas will not be subjected to the development of public water or sanitary sewer systems and the special tax costs associated with such facilities.

Densities of new residential developments will range from large acreage tracts up to one (1) dwelling unit per five (5) gross acres."

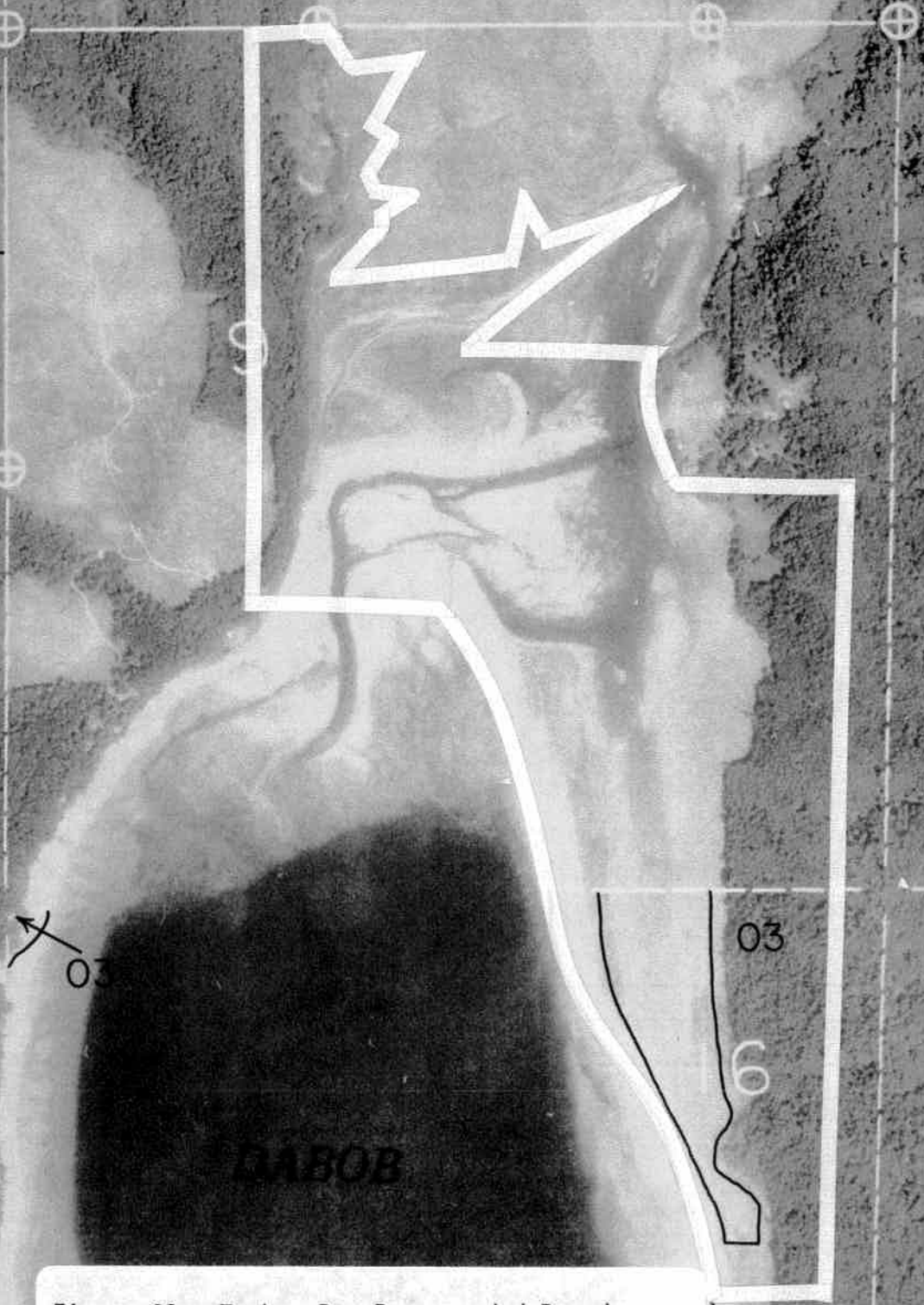


Figure 62: Tarboo Bay Recommended Boundary
Scale: 1" = 12,000"



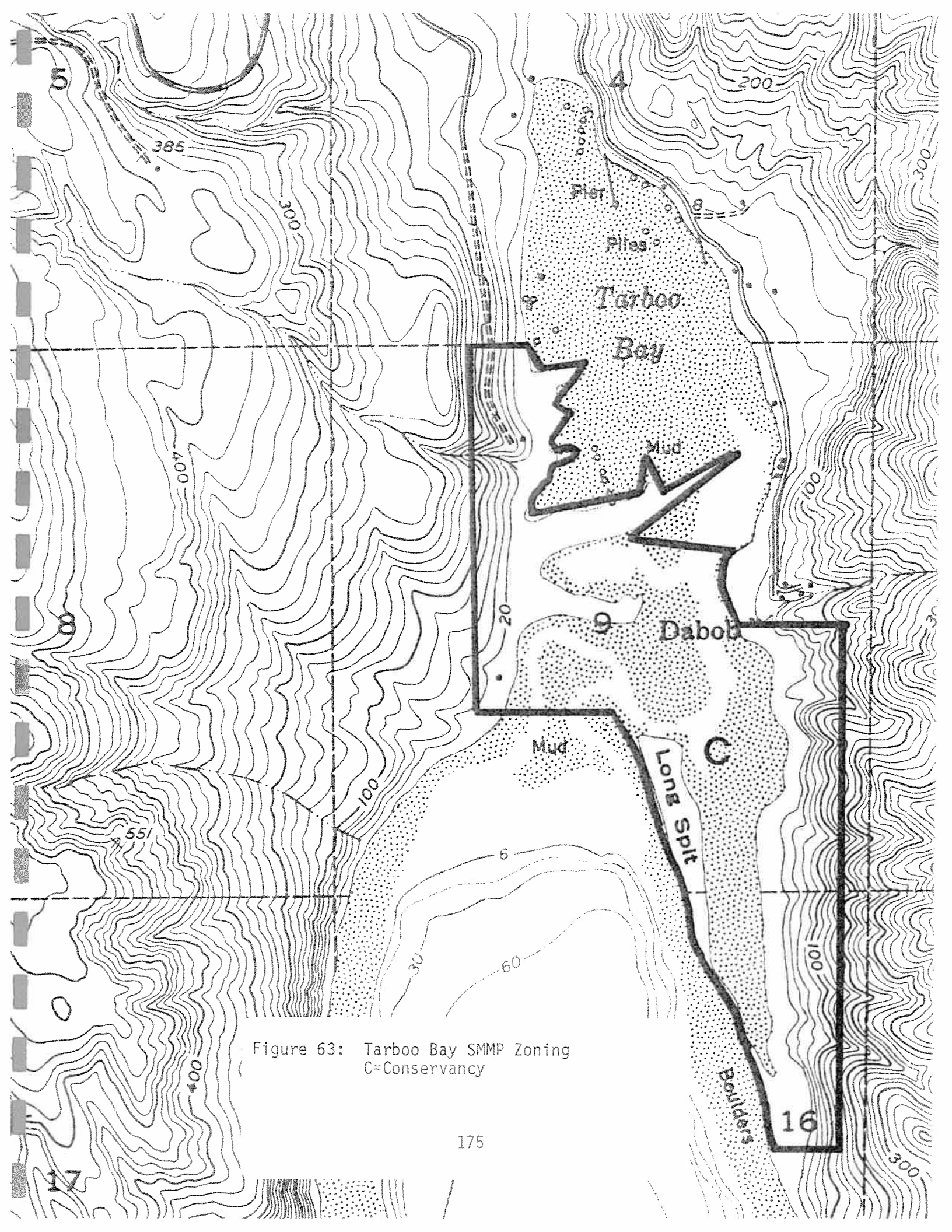


Figure 63: Tarboo Bay SMMP Zoning
C=Conservancy



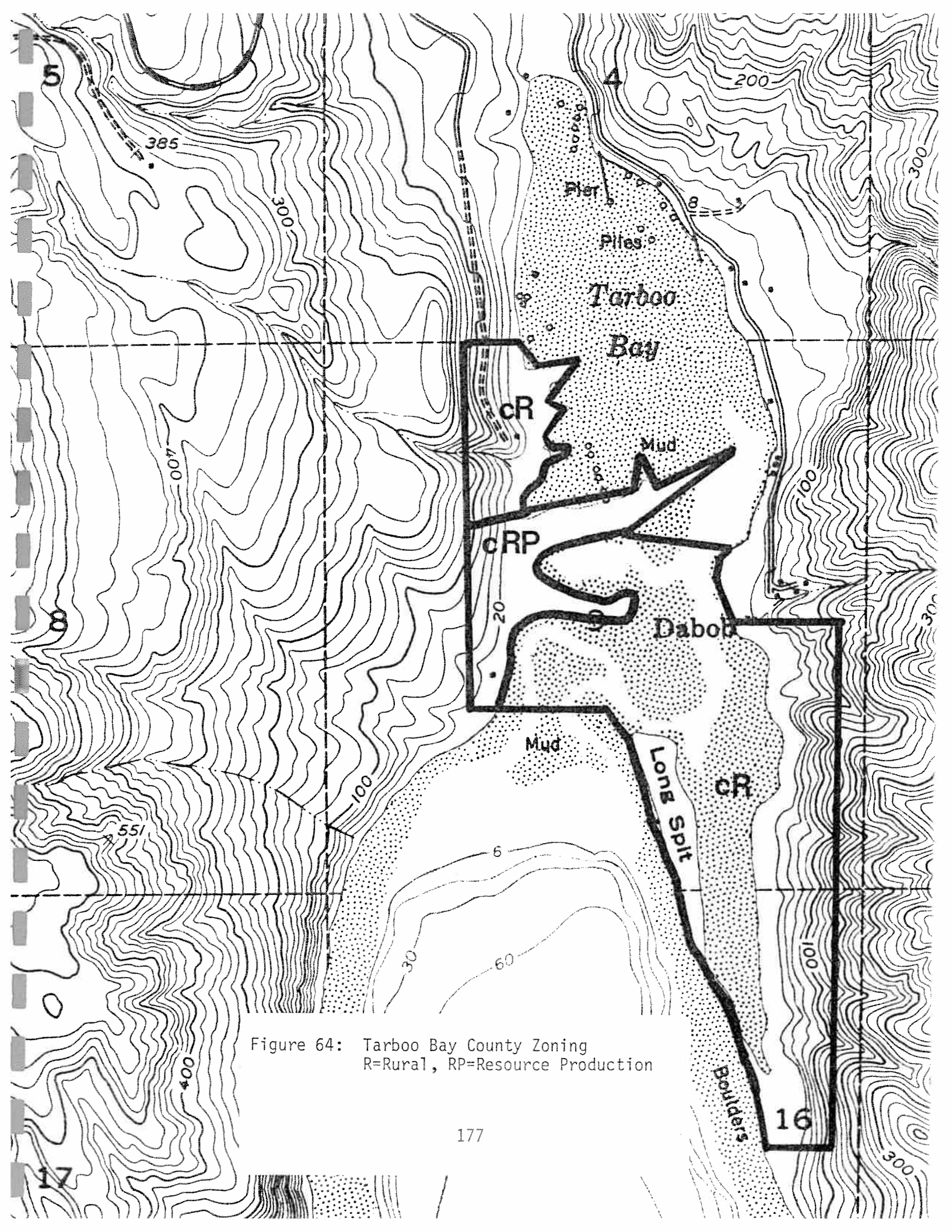


Figure 64: Tarboo Bay County Zoning
 R=Rural, RP=Resource Production



THORNDYKE BAY

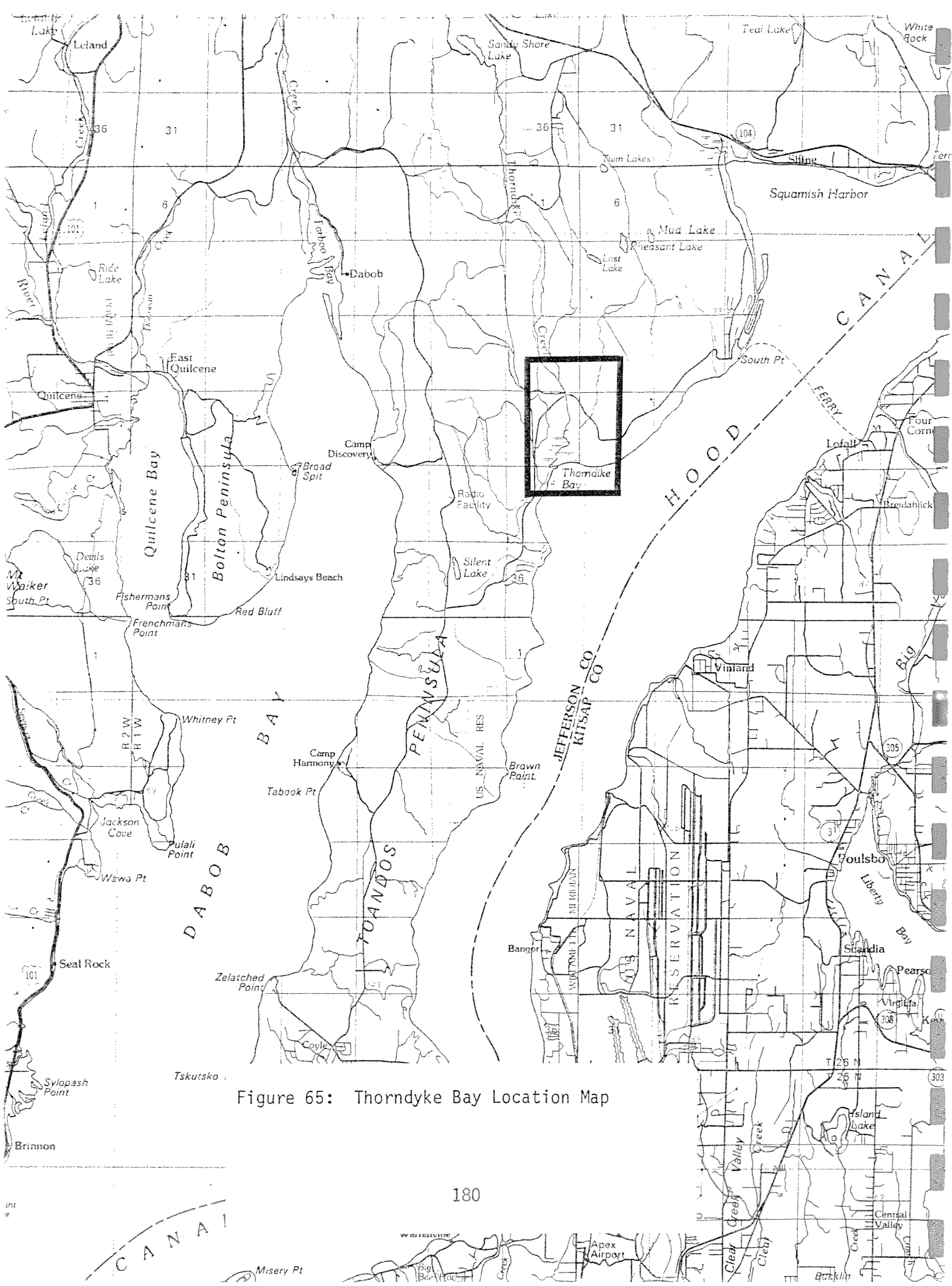


Figure 65: Thorndyke Bay Location Map

THORNDYKE BAY

LOCATION:

Jefferson County; T27N, R1E, portions of section 19, and T27N, R1W, portions of sections 24 and 25. The site is located on the east side of the Toandos Peninsula on Hood Canal, east of Quilcene (figure 65).

SIZE:

The proposed site is approximately 347 acres.

PROPOSED BOUNDARY:

The proposed boundary includes Thorndyke Bay, its associated wetlands, and the berm. It also includes a portion of the freshwater drainage feeding into the bay and a large upland buffer (figure 66).

The upland buffer and freshwater wetlands help protect water quality in Thorndyke Bay and reduce siltation. They provide habitat for wildlife associated with the bay and provide physical and visual buffers for the wetlands.

METHOD OF PROTECTION:

Acquisition is the recommended method of protection. If this is not possible, conservation easements or a Right-Of-First-Refusal are recommended.

MANAGEMENT CONSIDERATIONS

- 1) Cutting and removal of native vegetation should be avoided.
- 2) Recreational use of the area should be discouraged.
- 3) Spartina alterniflora should be eliminated from the site.
- 4) There should be no further road building and development within the proposed boundary.
- 5) Biocides should not be used within the proposed boundary*.
- 6) There should be no topographic alteration (diking, ditching, filling and soil movement) within the proposed boundary.

ZONING:

The Shoreline Management Master Program designates the proposed site **Natural and Conservancy** (see glossary) (figure 67).

In the Jefferson County Comprehensive Plan, the area is zoned **Rural** (figure 68).

Jefferson County's **Rural** designation is intended to apply to "areas of low to medium intensity development normally served by individual wells and septic tanks, although some small, "neighborhood" community water systems will be developed. Roads and other public services will remain rural in character consistent with the minimum standards for health and safety. Densities of new residential developments will range from large acreage tracts up to one (1) dwelling unit per gross acre for some individual projects."

* Application of herbicides to eliminate Spartina alterniflora using proven methods is a possible exception.

Figure 66: Thorndyke Bay Recommended Boundary

Scale: 1" = 8,640"

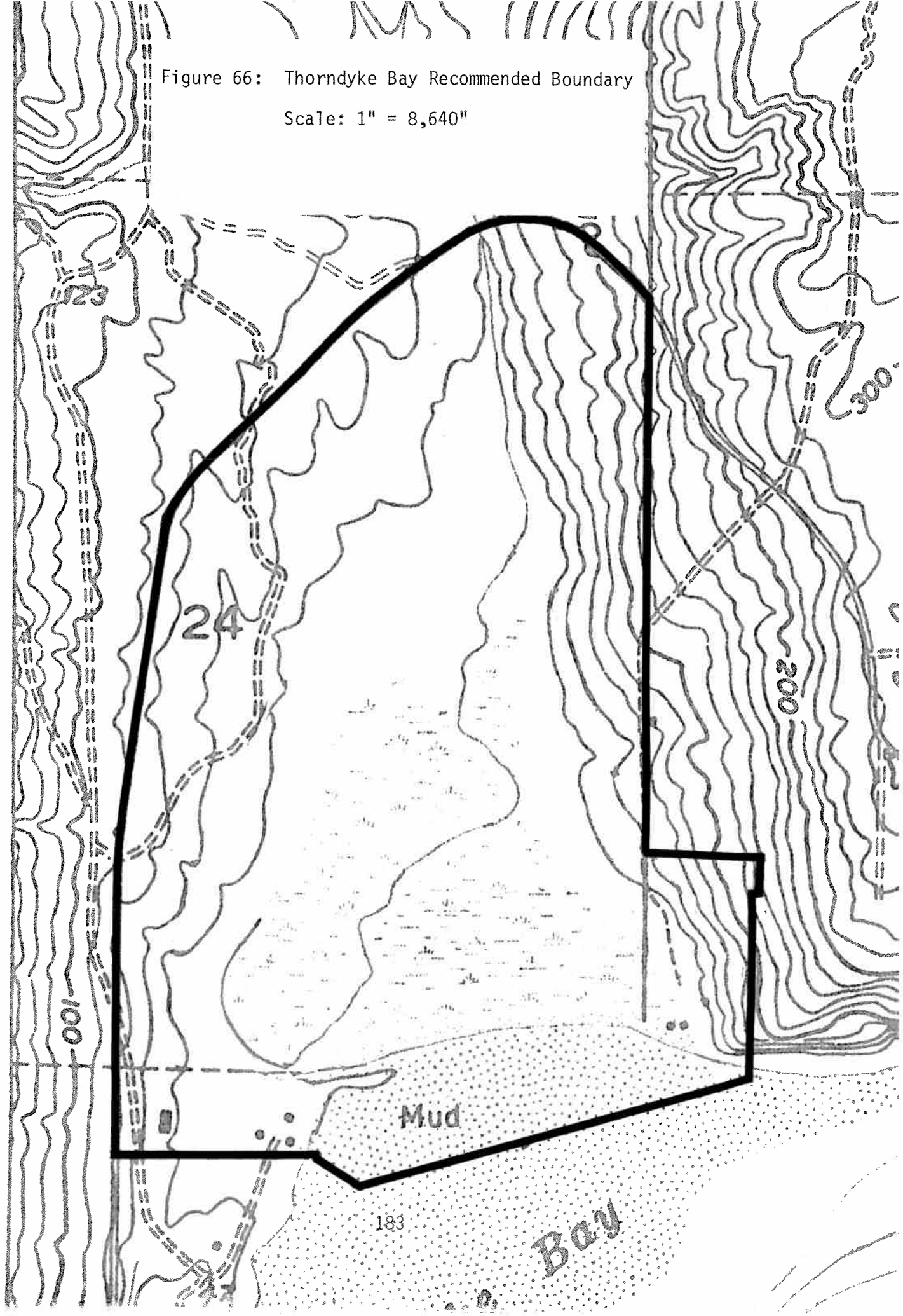
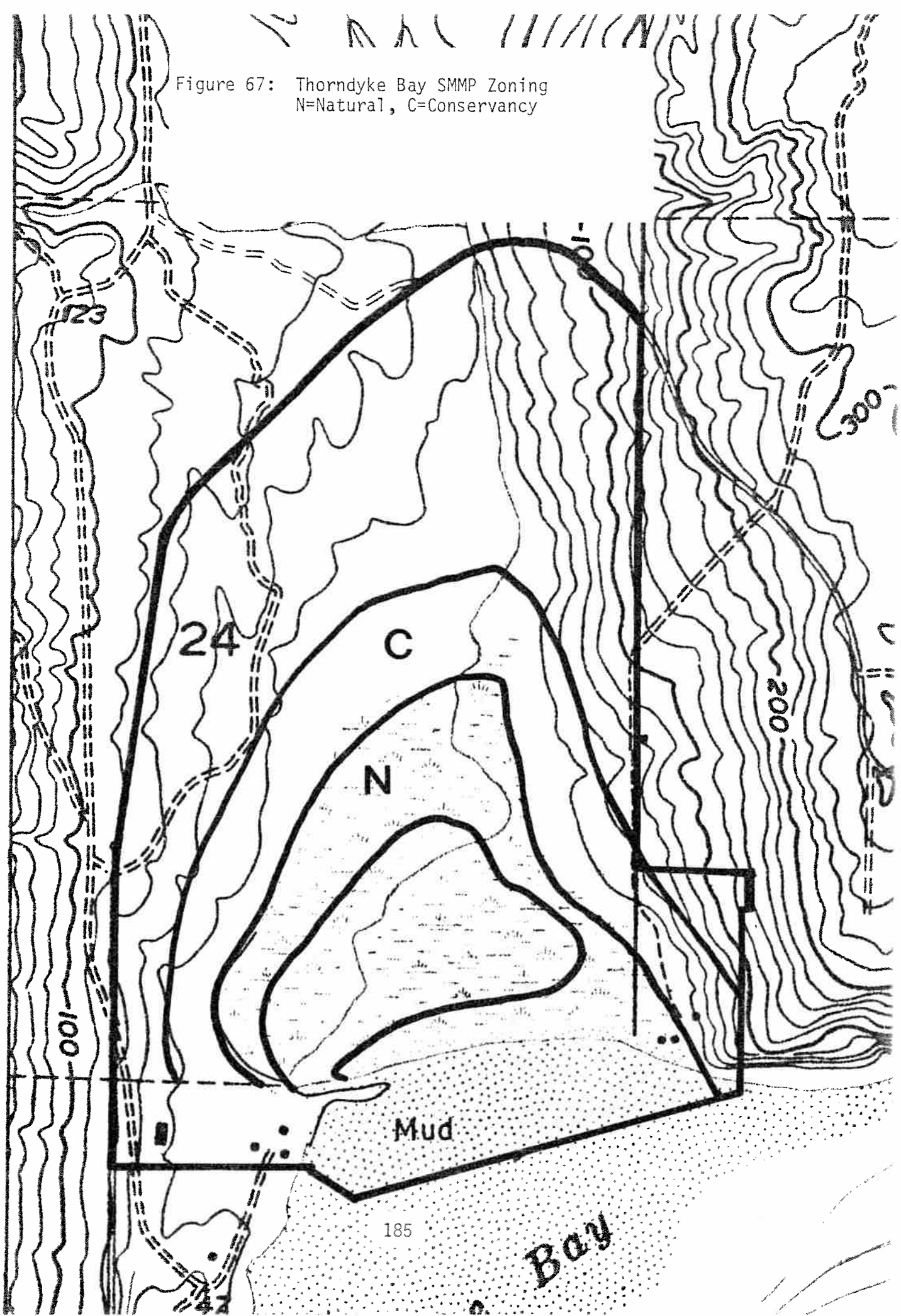
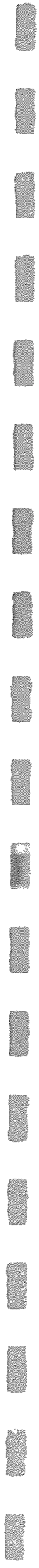
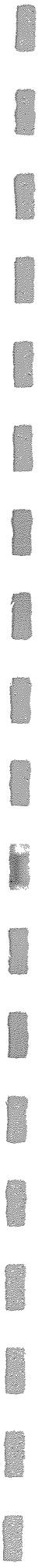




Figure 67: Thorndyke Bay SMMZ Zoning
N=Natural, C=Conservancy







WESTCOTT BAY

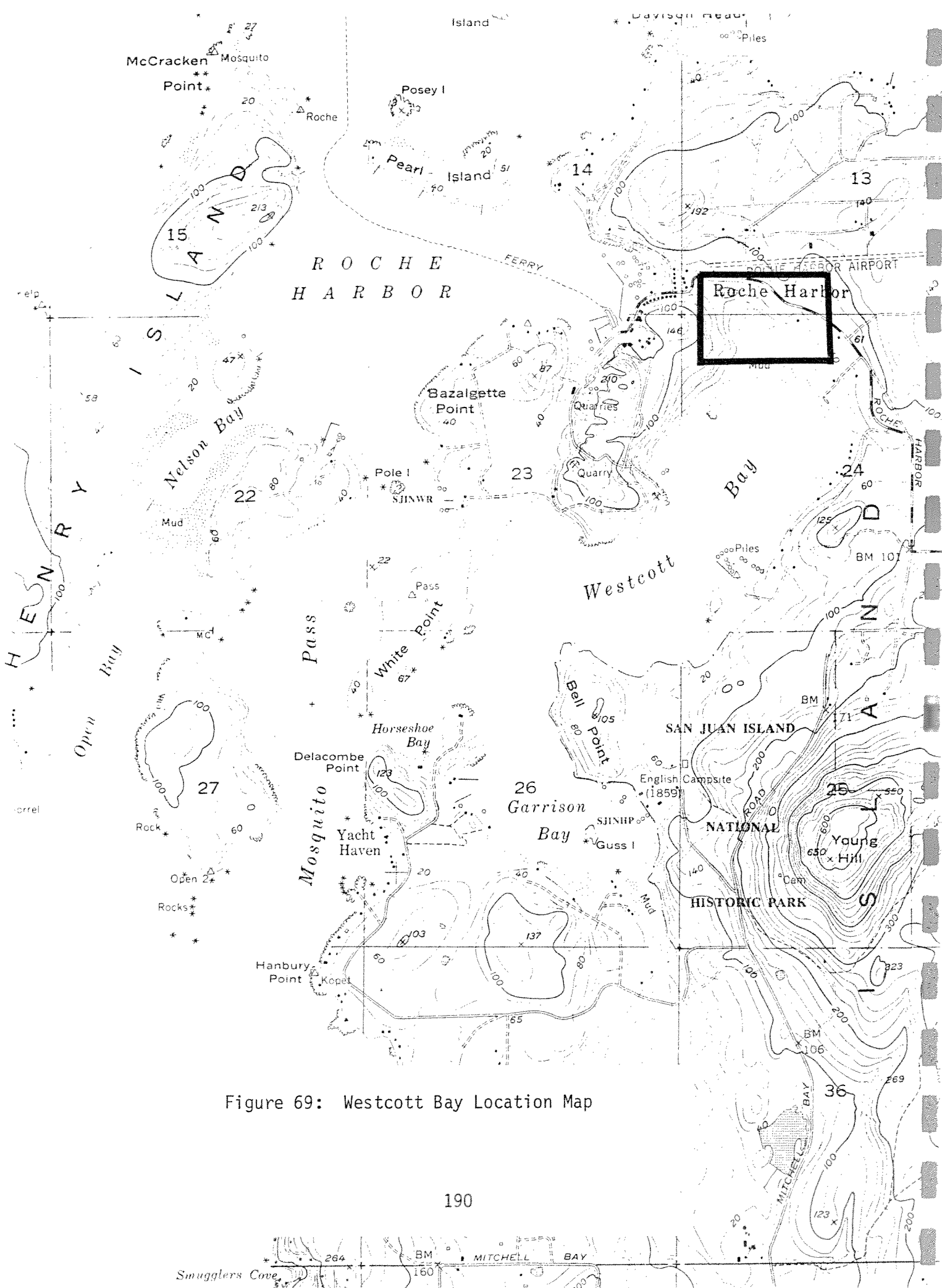


Figure 69: Westcott Bay Location Map

WESTCOTT BAY

LOCATION:

San Juan County; T36N, R1W, portions of sections 13 and 24. The site is located at the north end of Westcott Bay, just southeast of Roche Harbor, on San Juan Island (figure 69).

SIZE:

The proposed site is approximately 48 acres.

PROPOSED BOUNDARY:

The proposed boundary incorporates a small lagoon at the north end of Westcott Bay. It includes the salt marsh and tideflats within the lagoon, the tideflats outside the lagoon mouth, and an upland buffer (figure 70).

The upland buffer helps protect water quality and provides a physical and partial visual buffer for the lagoon. It also provides habitat for wildlife associated with the wetland.

METHOD OF PROTECTION:

Registration on the Washington Register of Natural Areas is recommended initially. However, for the longterm protection of the site, a conservation easement is recommended.

MANAGEMENT CONSIDERATIONS:

- 1) There should be no further road building or development within the proposed boundary.
- 2) Biocides should not be used within the proposed boundary.
- 3) There should be no further logging of existing woodlands.
- 4) Livestock should be excluded from the proposed site.
- 5) Water quality should be checked occasionally. If a problem develops, remedial action should be taken.

ZONING:

The Shoreline Management Master Program designates the lagoon **Natural** and the surrounding lands **Conservancy**. A small portion of the eastern part of the site is designated **Suburban** (see glossary) (figure 71).

The San Juan County Comprehensive Plan zones the portion of the proposed site in Section 24 as **Rural 5** and **Suburban**. That portion in Section 13 is zoned **Rural 2** (figure 72).

The purpose of San Juan County's **Rural** designation is to "protect comparatively undeveloped areas from urban and suburban forms of development. The purpose of the **Rural** designation is also to protect those areas which contribute to the rural, undeveloped atmosphere of the islands by limiting development to the types of uses which will not destroy or degrade that atmosphere." The **Rural 5** designation allows a maximum density of 1 dwelling per 5 acres. The **Rural 2** designation allows 1 dwelling per 2 acres.

The **Suburban** designation is to "protect and enhance existing medium density residential areas, to provide for additional areas of this type and to provide for non-residential uses which are or can be made compatible with residential areas, in a manner which will protect natural resources".

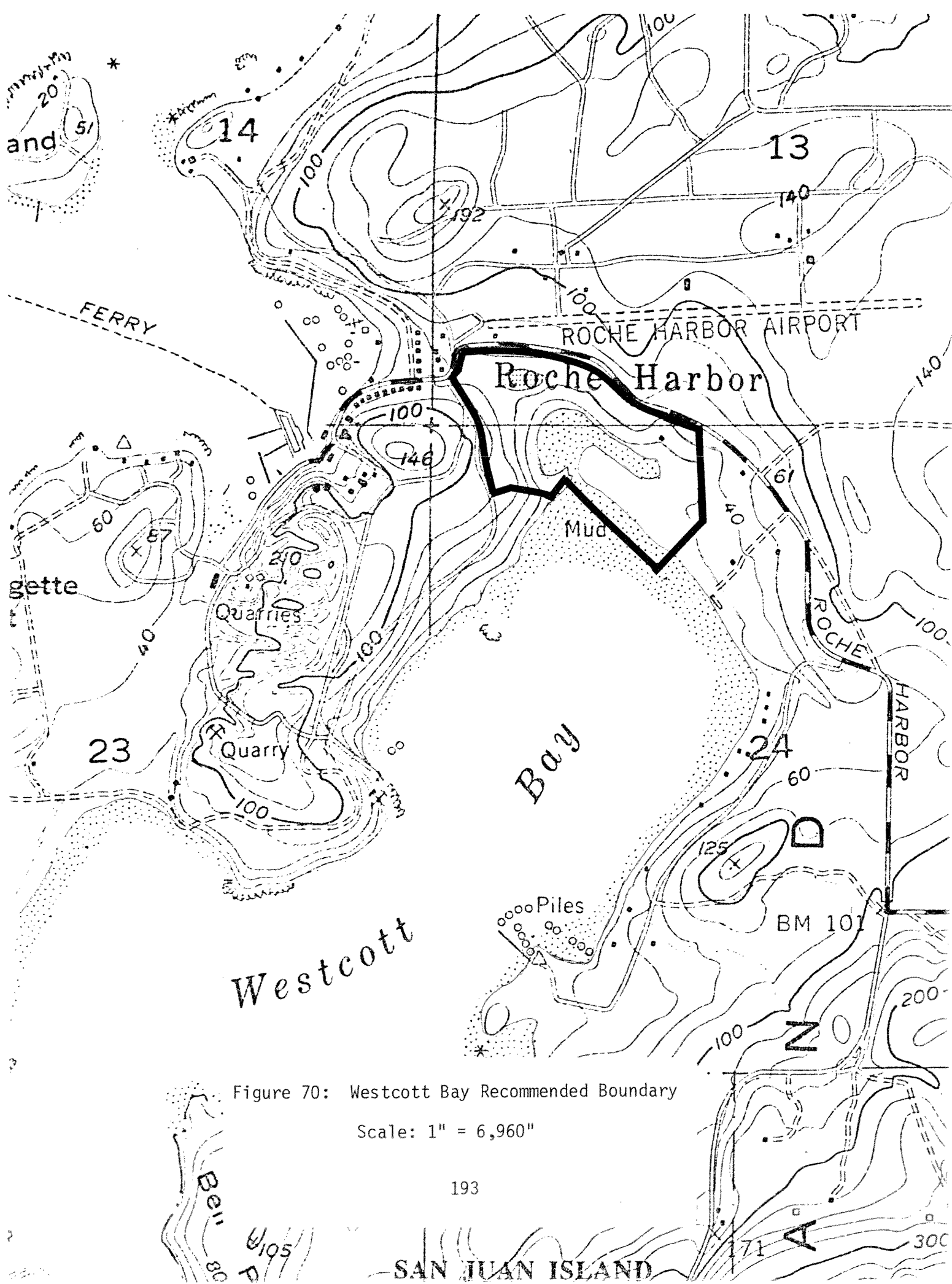
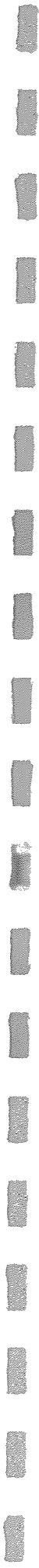


Figure 70: Westcott Bay Recommended Boundary

Scale: 1" = 6,960"



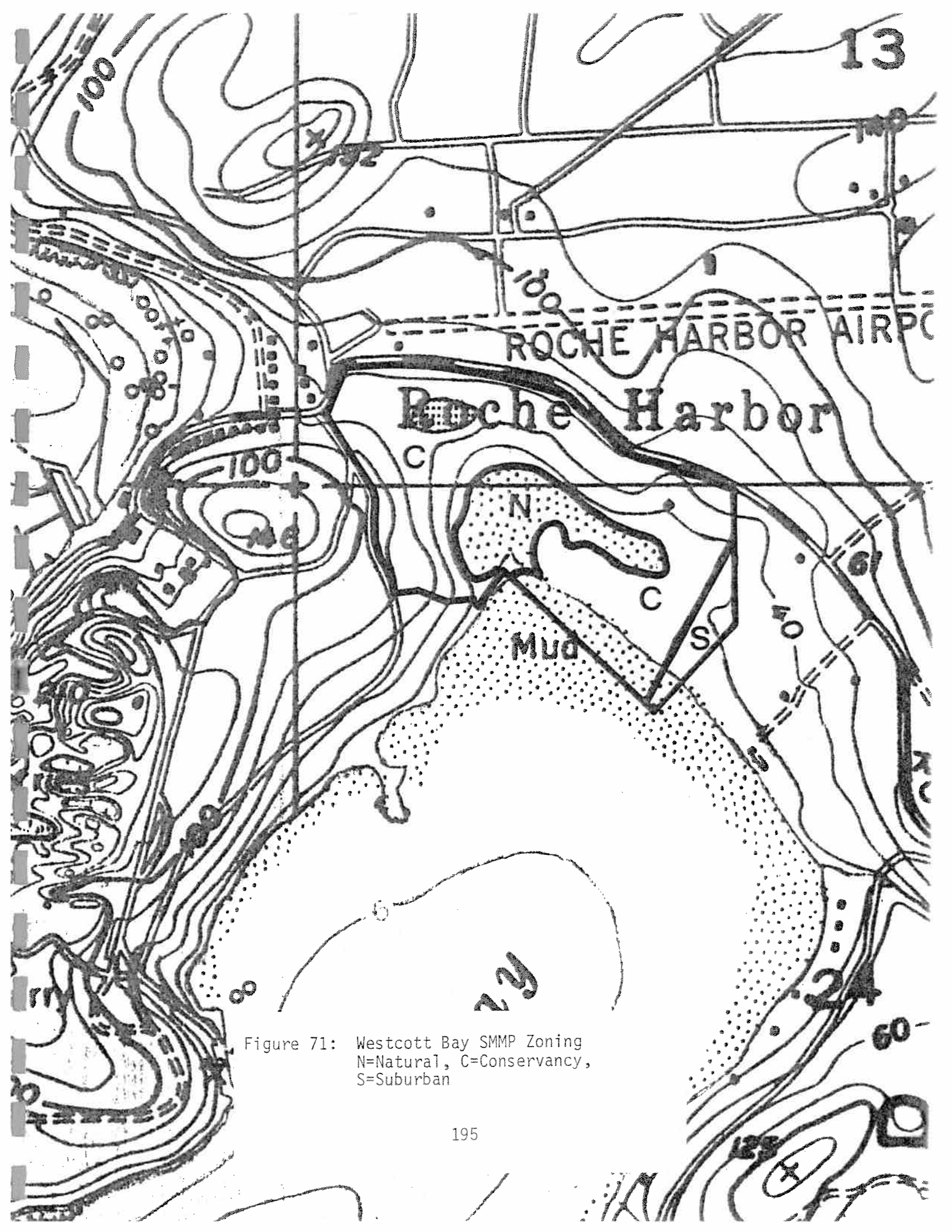


Figure 71: Westcott Bay SMMZ Zoning
 N=Natural, C=Conservancy,
 S=Suburban



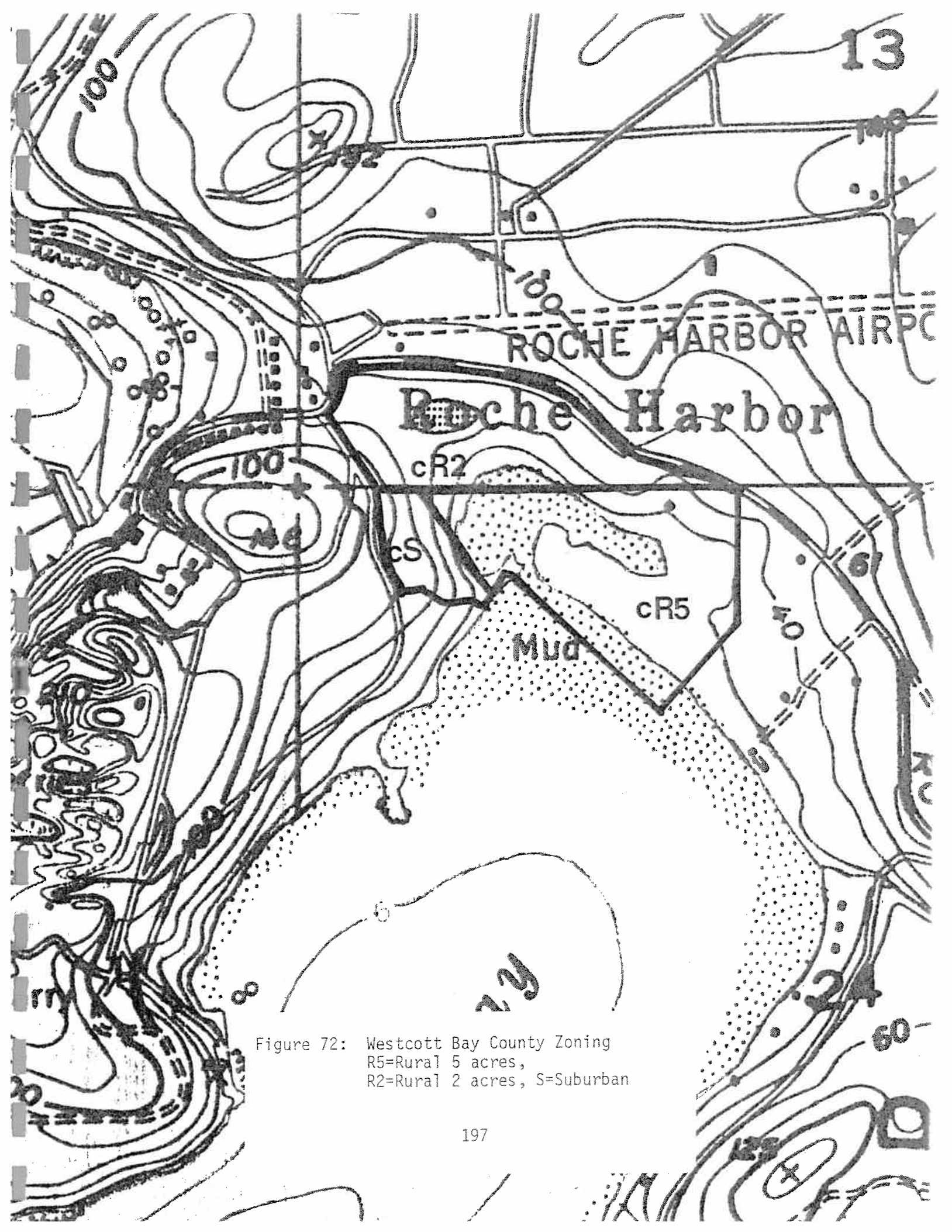


Figure 72: Westcott Bay County Zoning
 R5=Rural 5 acres,
 R2=Rural 2 acres, S=Suburban



GLOSSARY

GLOSSARY

Acquisition - is transfer of property ownership. Lands suggested for acquisition should be acquired from willing owners by gift, devise, purchase, grant, dedication, or means other than eminent domain. Lands can be purchased at or below fair market value.

Aquatic Environment - (Aquatic Shoreline Area - Skagit County Shoreline Management Master Program Chapter 6.)

The Aquatic Shoreline Area is all water bodies, including marine waters, lakes, and all rivers of the state together with their underlying lands and their water column, including but not limited to bays, straits, harbor areas, waterways, coves, estuaries, lakes, streamways, tidelands, bedlands and shorelands.

The Aquatic Shoreline Area designation is intended to encourage and protect appropriate multiple uses of the water or, in some cases, single purpose, dominate uses in limited areas; to manage and protect the limited water surfaces and foreshores from inappropriate activities or encroachment; and, to preserve and wisely use the area's natural features and resources which are substantially different and diverse in character from those of the adjoining uplands and backshores.

Areas to be designated as an Aquatic Shoreline Area should possess one or more of the following criteria:

- (1) All marine water areas seaward of the ordinary high water mark including estuarine channels, sloughs, and associated wetlands.
- (2) All lakes subject to this program below the ordinary high water mark.
- (3) All streamways of rivers designated shorelines of the State.
- (4) All natural swamps, marshes, and wetlands adjoining the above three categories of water bodies and all those which are not designated a Natural Shoreline Area.

Certificate of Registration - an official document issued by the Department of Natural Resources serving as written testimony on the importance of an area for the protection of one or more natural heritage resources, such area having been voluntarily registered with the DNR by the owner.

Conservancy Environment - Shoreline Management Act - Master Programs (173-16-040 WAC) - The objective in designating a conservancy environment is to protect, conserve and manage existing natural resources and valuable historic and cultural areas in order to ensure a continuous flow of recreational benefits to the public and to achieve sustained resource utilization.

The conservancy environment is for those areas which are intended to maintain their existing character. The preferred uses are those which are nonconsumptive of the physical and biological resources of the area. Nonconsumptive uses are those uses which can utilize resources on a sustained yield basis while minimally reducing opportunities for other future uses of the resources in the area. Activities and uses of a nonpermanent nature which do not substantially degrade the existing character of an area are appropriate uses for a conservancy environment. Examples of uses that might be predominant in a conservancy environment include diffuse outdoor recreation activities, timber harvesting on a sustained yield basis, passive agricultural uses such as pasture and range lands, and other related uses and activities.

The designation of conservancy environments should seek to satisfy the needs of the community as to the present and future location of recreational areas proximate to concentrations of population, either existing or projected. For example, a conservancy environment designation can be used to complement city, county or state plans to legally acquire public access to the water.

The conservancy environment would also be the most suitable designation for those areas which present too severe biophysical limitations to be designated as rural or urban environments. Such limitations would include areas of steep slopes presenting erosion and slide hazards, areas prone to flooding, and areas which cannot provide adequate water supply or sewage disposal.

Conservation Easement - a legal binding agreement conveying certain property rights from the property title holder to an authorized federal agency, state agency, or private organization. Those rights ensure that certain kinds of uses or development will not occur. Conservation easements become fixed to the property deed (see page).

Element - the basic unit of Washington's biologic and geologic environment which has been identified in the Natural Heritage Plan as in need of protection within a system of natural areas. Elements can be plant or aquatic communities, rare plant or animal species, or geologic features.

Native - indigenous to, or originating naturally in, Washington; remaining or growing in an unaltered natural condition.

Natural - as used in this document, indicates something existing or found in nature without human intervention.

Natural Area - any tract of land or water which supports high quality examples of terrestrial or aquatic ecosystems, habitats and populations of rare or endangered plant or animal species, or unique geologic features, as defined in the Natural Heritage Plan and is managed specifically to protect those examples.

Natural Area System - an assemblage of areas of land or water recognized by the state through the Department of Natural Resources as being important for the preservation of natural heritage resources, and registered or dedicated as natural areas for the protection and perpetuation of these significant features.

Natural Environment - Shoreline Management Act - Master Programs (173-16-040 WAC) - The natural environment is intended to preserve and restore those natural resource systems existing relatively free of human influence. Local policies to achieve this objective should aim to regulate all potential developments degrading or changing the natural characteristics which make these areas unique and valuable.

The main emphasis of regulation in these areas should be on natural systems and resources which require severe restrictions on intensities and types of uses to maintain them in a natural state. Therefore, activities which may degrade the actual or potential value of this environment should be strictly regulated. Any activity which would bring about a change in the existing situation would be desirable only if such a change would contribute to the preservation of the existing character.

The primary determinant for designating an area as a natural environment is the actual presence of some unique natural or cultural features considered valuable in their natural or original condition which are relatively intolerant of intensive human use. Such features should be defined, identified and quantified in the shoreline inventory. The relative value of the resources is to be based on local citizen opinion and the needs and desires of other people in the rest of the state.

Natural Heritage Advisory Council - a fifteen member council established under RCW 79.70.070 to advise the Department of Natural Resources of regulations necessary to carry out the provision of the Act; to recommend policy for the Natural Heritage Program; to help identify natural areas from the data base, review and reject or approve them for registration; and to advise state land managing agencies of such areas under their respective jurisdiction.

Natural Heritage Resources - (see Element) plant community types, aquatic types, unique geologic features and special plant and animal species and their critical habitat.

Register - to develop a nonbinding, voluntary agreement between the Department of Natural Resources and the owner of an area supporting one or more significant natural heritage resources to manage the property for the protection and perpetuation of the important features.

Rural Environment - Shoreline Management Act - Master Programs
(173-16-040 WAC) - The rural environment is intended to protect agricultural land from urban expansion, restrict intensive development along undeveloped shorelines, function as a buffer between urban areas, and maintain open spaces and opportunities for recreational uses compatible with agricultural activities.

The rural environment is intended for those areas characterized by intensive agricultural and recreational uses and those areas having a high capability to support active agricultural practices and intensive recreational development. Hence, those areas that are already used for agricultural purposes, or which have agricultural potential should be maintained for present and future agricultural needs. Designation of rural environments should also seek to alleviate pressures of urban expansion on prime farming areas.

New developments in a rural environment are to reflect the character of the surrounding area by limiting residential density, providing permanent open space and by maintaining adequate building setbacks from water to prevent shoreline resources from being destroyed for other rural types of uses.

Public recreation facilities for public use which can be located and designed to minimize conflicts with agricultural activities are recommended for the rural environment. Linear water access which will prevent overcrowding in any one area, trail systems for safe nonmotorized traffic along scenic corridors and provisions for recreational viewing of water areas illustrate some of the ways to ensure maximum enjoyment of recreational opportunities along shorelines without conflicting with agricultural uses. In a similar fashion, agricultural activities should be conducted in a manner which will enhance the opportunities for shoreline recreation. Farm management practices which prevent erosion and subsequent siltation of water bodies and minimize the flow of waste material into water courses are to be encouraged by the master program for rural environments.

Suburban Environment (San Juan County Code Chapter 16.40.403) - The purpose of the Suburban Environment is to protect and enhance existing medium density shoreline residential areas, to provide for additional areas of this type and to provide for non-residential uses which are or can be made compatible with residential areas, in a manner which will protect the shore process corridor and its operating systems.

The Suburban Environment is an area capable of accommodating considerable medium density residential development, but which is not suitable or desirable for a more restrictive designation. Shoreline areas to be designated Suburban should meet one or more of the following criteria:

- (1) areas presently containing considerable medium density residential development;
- (2) areas designated for the expansion of medium density residential uses in the adopted plans of public agencies;

- (3) areas which do not fall under 1 or 2 above, but which do not represent major biological or physical limitations for medium density residential development and which can provide the necessary framework of public services, utilities, and access required to accommodate such development;
- (4) areas which are suitable for non-residential uses or that can be made compatible with residential areas;
- (5) areas which would make desirable transition zones between Urban and Rural, or Urban and Conservancy Environments.

Urban Environment - Shoreline Management Act - Master Programs

(173-16-040 WAC) - The objective of the urban environment is to ensure optimum utilization of shorelines within urbanized areas by providing for intensive public use and by managing development so that it enhances and maintains shorelines for a multiplicity of urban uses.

The urban environment is an area of high intensity land use including residential, commercial, and industrial development. The environment does not necessarily include all shorelines within an incorporated city, but is particularly suitable to those areas presently subjected to extremely intensive use pressure, as well as areas planned to accommodate urban expansion. Shorelines planned for future urban expansion should present few biophysical limitations for urban activities and not have a high priority for designation as an alternative environment.

Because shorelines suitable for urban uses are a limited resource, emphasis should be given to development within already developed areas and particularly to water dependent industrial and commercial uses requiring frontage on navigable waters.

In the master program, priority is also to be given to planning for public visual and physical access to water in the urban environment. Identifying needs and planning for the acquisition of urban land for permanent public access to the water in the urban environment should be accomplished in the master program. To enhance waterfront and ensure maximum public use, industrial and commercial facilities should be designed to permit pedestrian waterfront activities. Where practicable, various access points ought to be linked to nonmotorized transportation routes, such as bicycle and hiking paths.

Washington Register of Natural Areas - the official list of private, state and federal natural areas recognized by their owners and the state as containing significant natural heritage resources, and managed by their owners and/or the DNR for the protection of these natural features.

BIBLIOGRAPHY

BIBLIOGRAPHY

Heritage Conservation and Recreation Service. - . Conservation easements in Washington. U.S. Department of the Interior booklet. 8p.

Kunze, L.M. 1984. Puget Trough coastal wetlands: a summary report of biologically significant sites. Report by the Washington Natural Heritage Program, Department of Natural Resources to Washington Department of Ecology. Contract No. C-83061. 154p.

Washington Department of Natural Resources. 1985. State of Washington Natural Heritage Plan. Olympia. 153p.