ANALYSIS OF SHORELINE PERMIT APPLICATIONS IN NON-RESIDENTIAL SHORELINE OF SEATTLE

1983

CZIC COLLECTION

Washington Coastal Zone Management Program

GB
458.8
.A52
1983

AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
GPO

Property of CSC Library

U.S. DEPARTMENT OF COMMERCE NOAA
COASTAL SERVICES CENTER
2234 SOUTH HOBSON AVENUE
CHARLESTON, SC 29405-2413

Analysis of Shoreline Permit Applications in Non-residential Shoreline of Seattle

CZIC COLLECTION

The preparation of this report was financially aided through a grant from the Washington State Department of Ecology with funds obtained from the National Oceanic and Atmospheric Administration, and appropriated for Section 306 of the Coastal Zone Management Act of 1972.

Department of Construction and Land Use
Seattle Shoreline Master Program Revision Project
Background Study
1983

GB458.8 .A13 1983
Washington. State Dept of Ecology
JAN 7 1998

LU36/SPA.1

TABLE OF CONTENTS

		Page
I.	Introduction to Shoreline Master Program Revision Background Study	1
II.	Introduction to Shoreline Permit Analysis	1
III.	Purpose and Method of the Shoreline Permit Analysis	
	A. Purpose	2
	B. Methodology	3
	C. What analysis was made	3
IV.	General Statistical Findings of the Permit Analysis	
	1. The Number of Permit Applications	5
	2. Decisions on the Permit Applications	7
	3. Denied Permit Applications	7
	4. Where do the Applications Come From?	4
V.	Water-Dependence	
	1. How Many Water-Dependent sites Exist Now?	13
	2. Direction of Change in Water-Dependence in Permit Applications	13
	3. New Non-Water-Dependent Uses	17
	4. New Mixed Uses Including Water-Dependent Use as a Minor Use	19
	5. New Water-Dependent Uses	21
	6. General Direction of Change	25
VI.	Public Access	
	1. General Public Access by Field Inventory	26
	2. Regulated Public Access Under the Shoreline Master Program Permits	28
	3. Streets and Water Ways	29
VII.	Development Activities Under the Permits	
	1. What Development Activities are Proposed on Permits	31
	2. Development Activities of Selected Sites	33

List of Tables, Graphs and Maps

		Page
Graph 1	Application Numbers by Year	5
Table 1	Number of Applications from Public Sites	6
Map 1	Shoreline Environment	9a
Map 2	Land Use Zones	9b
Table 2	Number of Applications in Each Combination of Land use Zone and Shoreline Environment	10
Map 3	Geocodes of Study Area	10a
Table 3	Sites with Permit Applications	11
4	Upland Sites and Permit Application	12
5	When Were Changes in Use Permitted by the Master Program	15
6	Changes in Water-Dependence of Granted Permits	16
7	Sites Applied for Changes from Water-Dependent to Non-water-dependent Uses	17
8	Changes from Vacant Land to Non-Water-Dependent Use	18
9	Change of Use from Water-Dependent to Mixed Uses including Water-Dependent Use	19
10	Under-utilized or Vacant Lots into Mixed Uses	20
11	Vacant Land into Water-Dependent Uses	22
12	Changes from Non-Water-Dependent Uses	23
13	Changes from Non-Water-Dependent Uses to Mixed uses having Minor Water-Dependent Use	23
14	Duwamish and Harbor Island Changes in Water-Dependent	25
15	New or Removed Water-Dependent Uses according to Use Type	26
16	Sites with Public Access	27
17	Private sites with Public Access	28
18	Public sites with Regulated Public Access	29
19	Number of Sites proposing Development Activities - First Permit Application Only	32

SHORELINE PERMIT ANALYSIS - 1982

I. Introduction To The Seattle Shoreline Master Program Revision Background Study

The Department of Construction and Land Use began its task of revising the Seattle Shoreline Master Program in the Spring of 1982 to more closely meet the goals and policies of the program. The task consists of inventorying all sites in the study area, writing a series of background studies, conducting citizen participation and proposing changes to the Master Program, and writing an Environmental Impact Statement. The final step in the task of presenting the proposed changes to the City Council is projected to be the end of 1983.

Background studies will include the following:

1. Detailed report of the existing conditions on (a) Central Waterfront, (b) Salmon Bay and Ship Canal, (c) Lake Union, and (d) the Duwamish Waterway and Harbor Island.

2. Report on water quality on Elliott Bay, the Duwamish Waterway, Ship Canal and Lake Union.

3. A study of 50 Water-Dependent Businesses in Seattle.

4. Analysis of the Shoreline Permits.

Each of these studies will be used in drafting changes to the Master Program along with the comments gathered through public participation.

II. Introduction To Shoreline Permit Analysis

Since June of 1971, the City of Seattle has been regulating land use within all of the surrounding water bodies and all the abutting land areas 200 feet landward from the ordinary high water mark under the State Shoreline Management Act of 1971. In these areas, a shoreline permit has been required to undertake any substantial development, defined in the Act as exceeding cost or fair market value of one thousand dollars, or any development which materially interferes with the normal public use of the water or shorelines, with certain exceptions such as construction related to single family residences, emergency repair and operation of waterway systems.

The City of Seattle began using its Shoreline Master Program in 1976. The Program was officially adopted by the City Council in the following year. Before that date permits were reviewed under Department of Ecology Guidelines (WAC 173-16). Under the Master Program, a shoreline permit is required for any substantial development as defined in the State Shoreline Management Act and for establishing or expanding uses which are in variance with the Master Program or which are allowed only

as conditional uses under the Master Program. A shoreline permit may have any combination of the three types of permission.

Decisions on applications for shoreline permits fall into one of five categories:

1. Granted by the City
2. Granted with a condition or conditions by the City
3. Denied by the City
4. Cancelled by the City
5. Withdrawn by the applicant

A permit application may be cancelled by the City when adequate information needed for processing is requested but not provided by the applicant. An applicant may withdraw his permit application any time in the procedure.

III. Purpose and Method Of The Shoreline Permit Analysis

A. Purpose

The purpose of the shoreline permit analysis of 1982 is twofold: to find what has been allowed to develop in the Seattle shoreline under the State Shoreline Management Act and the Seattle Shoreline Master Program in the past; and to identify physical areas in the Seattle shoreline or parts of the Master Program regulations which need special attention in the revision task.

The shoreline permit analysis will focus on the following six questions:

1. When were most major changes proposed on shoreline sites under the permits?

2. What uses did the Shoreline Management Act and the Seattle Shoreline Master Program permit on the sites where a permit was granted?

3. Which parts of the Seattle shoreline were most active in permit applications?

4. What kinds of development activities have been applied for through shoreline permits applications?

5. Has the Shoreline Master Program successfully promoted public access?

6. Do the shoreline permits show trends of a change of land use on our shorelines from water-dependent and water-related uses to non-water-dependent and non-water-related uses and/or from industrial-commercial water-dependent uses to recreational water-dependent uses?

B. Methodology of the Shoreline Permit Analysis - 1982

The Shoreline Permit Analysis - 1982 examined permits that were applied for within the study area which included all nonresidential shorelines in Lake Union, Elliott Bay, and the Duwamish River. The permit information was gathered in conjunction with the Shoreline Inventory - 1982. The advantage of this method was that the inventory information for each site with a permit was linked to its permit application. A disadvantage was that a maximum of only three permit applications per site were analyzed in detail due to the limited capacity in the computer program.

C. What Analysis Was Made?

Within the study area (geocodes 1 to 26), all permit applications were analyzed except for:

(1) Permits for single family residences.
(2) Permits for houseboat remodeling.
(3) Permits for utilities which do not comprise the principal land use on the sites.

These exceptions were made because for the most part these permits did not represent a change in land use and because our review concentrated on commercial and industrial uses and the issue of water-dependency.

Permits which were counted or analyzed had been applied for between June, 1971 and December, 1982. An earlier report by DCD analyzed permits from 1971 to 1976.

The types of information gathered on the permits are as follows:

1. Number and listing of shoreline permit applications on each site.

2. Purpose of each of the three most significant permit applications on each site.

3. Decision on the three applications.

4. Presence or absence of change in land use of site, such as from a bakery to a car repair.

5. Type of the land use change in terms of water-dependence.

This analysis was made on permits and applications only rather than on projects constructed. However, since permits indicate a property owner's expectations, they are as much an indication of development pressure as are the uses and buildings finally constructed.

The field inventory of the 787-site, Seattle non-residential Shoreline found 27 types of land uses. Each site was further classified in terms of types and degree of water-dependence. The eight classes of water-dependence were:

	Category	Examples
0.	Vacant Land	
1.	Water-Dependent - Industrial/Commercial (WD-IC)	Shipbuilding
2.	Water-Dependent - Recreational (WD-REC)	Pleasurecraft, moorage, park
3.	Water-Related (WR)	Cement manufacture with water transportation
4.	Not Water-Related (NOT WD-WR)	Restaurant, office
5.	Floating Home (FLHM)	
6.	Water-Dependent - Both Industrial/Commercial & Recreational (WD-BOTH)	Boat repair with moorage for pleasurecraft
7.	Marine Related - not Water-Dependent (MR)	Retail/wholesale of marine supplies
8.	Multiple Use including minor Water-Dependent Use (MU-INC-WD)	Restaurant with a separate moorage, office with moorage

Because much of the discussion of the permit analysis will revolve around changes from one water-dependent category to another, it is important to understand the limitation of the category system. Although many sites have more than one use in different water-dependent categories, it was not possible under the inventory program developed to assign more than one water-dependent category to a site. Instead the dominant use on each site was identified and the water-dependent category of that use was assigned to the site. Two exceptions to this rule are the categories "water-dependent both industrial - commercial and recreational" and "multi-use including a minor water-dependent use" which were specifically developed for multiple use sites.

Because of this system, the permit analysis includes category changes that occurred both from the replacement of one use by another in a different category and from the addition of a new use to a site not fully occupied by the existing uses.

A more detailed discussion of the inventory procedure can be found in a separate report.

The permit analysis grouped the eight water-dependence categories into two major categories for some analysis:

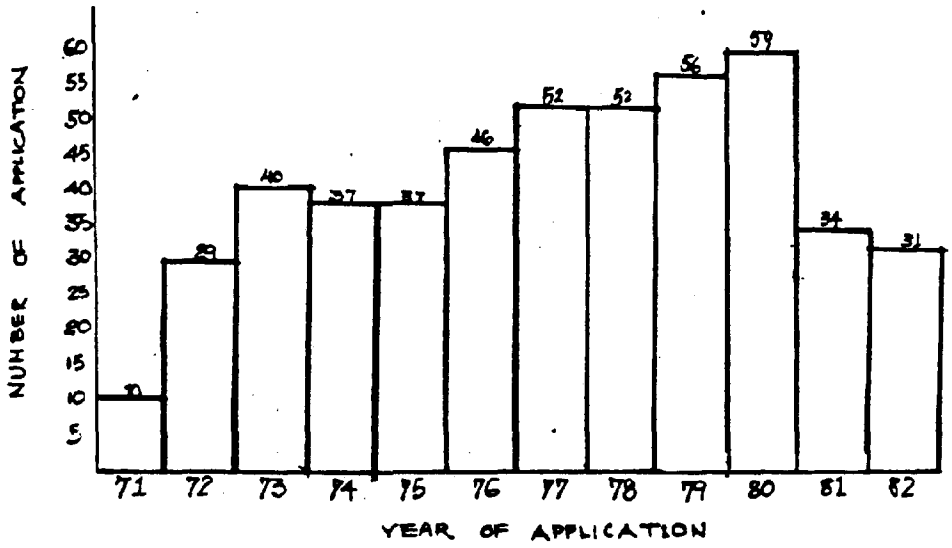
Water-Dependent Group:	1. Water-Dependent I-C 2. Water-Dependent -R 3. Water-Related 5. Floating Home 6. Water-Dependent Both 8. Multiple Use Including Water-Dependent
Non-Water-Dependent Group:	0. Vacant 4. Not Water-Related or -Dependent 7. Marine-Related

IV. General Statistical Findings Of The Permit Analysis

1. The Number of Permit Applications

Since the beginning of the Shoreline Permit Administration in 1971, the City of Seattle has handled a total of 483 applications within the study area. Generally the number of applications increased gradually until 1980 and dropped off sharply in 1981 as shown in the chart below. No such drop in number of applications for all the land use applications including conditional use, variance, street use, rezone and shoreline permits was seen in 1980, 1981 or 1982: their yearly totals stayed at 592, 520 and 599 permits respectively.

Shoreline Substantial Development Permit
Application Numbers by Year in the Study Area



Of the total of 483 permit applications on non-residential shorelines, 399 applications, were analyzed. A decision had been made prior to the information gathering that a maximum of three permits for any site were to be analyzed in detail. For those sites with more than three permits, the three selected were to show changes in use, major redevelopment of site or other indicators of significance in the shoreline development trend. The computer data show that 87 percent of the sites in the study area had three or fewer permit applications as shown in the table below:

Total Number Of Permits Per Site	Number of Sites
1	108
2	47
3	37
4	7
5	6
6	7
7	4
8	3
9	1
	220

These permit applications regulate the land use of an overwhelming majority of the shoreline area, since 76 percent of the land area of the non-residential shoreline, was contained within sites which applied for a shoreline permit in the last 12 years. Among the waterfront sites, the rate is even higher at 80 percent. Among the upland sites, which constitute 5 percent of the non-residential shoreline area in terms of square footage, sites which applied for a permit accounted for 14 percent of the upland area.

Of the entire non-residential shoreline of 788 sites, 220 sites applied for a permit; this figure constitutes 28 percent of the total study area in number of sites.

All types of public owned land has been active in applying for shoreline permits, as the table below shows. The low rate of activity on City land compared to land owned by other public agencies may be due to the fact that the City land includes street ends.

TABLE 1: NUMBER OF PERMIT APPLICATIONS FROM PUBLIC SITES

Type of Public Sites	Number of Total Sites	Number of Permits Applied
City	102	14
County	3	5
State	31	8
Federal	8	2
Port	24	74
Metro	3	1

2. Decisions on the Permit Applications

The 399 permit applications under the Seattle Shoreline Master Program were administered by the City of Seattle in the following manner:

Applications	% of Total
Denied - 15 applications	4
Granted - 227 applications	57
Conditionally Granted - 122 applications	31
Withdrawn - 15 applications	4
Cancelled - 4 applications	1
In Process - 16 applications	4
TOTAL: 399 Applications	100%

Eighty-eight percent of the applications were granted either outright or with conditions. Several applications were withdrawn by the applicants for various reasons, including financial difficulty. Four applications were cancelled by the City for lack of adequate information to process the applications. An applicant whose application is cancelled or withdrawn has relinquished his right to appeal to the State Shoreline Hearing Board for any disagreement with the City's decision on the application, while a denied application can be appealed.

3. Denied Permit Applications

For any of the twelve years during which the shoreline permits have been issued, the number of applications that were denied has been very small. The total has been fifteen. Seven of the twelve years had a few denials each and five years had none. Three of the fifteen denials were issued to water-dependent uses prior to 1976. The reason for the small total number of denials appears to be that an applicant is required to speak with the City at a preliminary meeting prior to filing of his/her application. At the meeting, applications for a use or bulk dimensions differing greatly from the Program requirements would be pointed out; thus, a change in the proposal is likely to follow, to increase the chances of approval.

A large majority of the denied applications were for non-water-dependent uses with the following breakdown:

Restaurant/tavern/fast food:	7
Office	2
Multi-unit residential	3

The distribution of the total denied applications is shown in the table below.

	Water-Dependent	Non-Water-Dependent	Total
Lake Union	1	5	6
Central Waterfront	0	3	3
Shilshole	0	3	3
Duwamish	2	0	2

The reasons for the denials of the applications fall into the following groups:

1. Bulk regulations not met (lot coverage, height, view corridor): 5

2. Use not allowed over water: 6

3. Conditional Use criteria not met: 1

4. Construction activity in or over water not allowed: 2

The majority involved expansion of structures that were non-conforming with the Program, either in bulk requirements, such as lot coverage, height or view corridor or in uses such as a restaurant or office structure partially or entirely over water. These sites were located in Lake Union, Central Waterfront, and Shilshole Bay. All of them had some use of their sites already and were denied expansion of their existing uses on the sites.

One case involved new development of a difficult site. After the denial of the first permit application, a design modification was made and a permit was issued.

Three applications for water-dependent uses, a shipyard, a boat repair and service, and a ready mix cement company, applied for construction activities in or over water, related to the water-dependent aspect of their businesses. The application by a concrete mix company appears to have been denied for too large an amount of fill proposed in 1972. The ship yard application appears to have been denied in 1972 since the proposed concrete slab would cover too much water area. The boat repair and service firm was denied its building addition since it failed to meet bulk requirements. None of the three denials was followed by a reapplication for similar actions. Two out of the three sites are still operating in the same businesses that had applied for the denied permits and have applied for permits since that time for other actions. The third, a ready mix concrete company, was replaced by another set of businesses, a school bus parking lot and a barge operation.

4. Where Do the Applications Come From?

There are several ways to answer this question. First, we will look at the shoreline environments and land use zones from which the applications came. The entire Seattle shoreline is divided into five environments: Conservancy Natural (CN), Conservance Management (CM), Urban Stable (US), Urban Residential (UR) and Urban Development (UD). The purpose of the CN environment is to preserve an area in a natural state; the CM environment is to protect an area for environmentally related public purposes, such as parks, marinas and aquaculture. The US environment is for controlled development for a mix of uses maintaining the existing scale and intensity. This environment has two subareas, US/Lake Union and US/Central Waterfront, to reflect the specific characteristics of the areas. The UD environment is for commercial and industrial purposes. The distribution of the environments is shown in an approximation in the attached map (Map 1).

In addition to the shoreline environments, the Seattle shoreline is zoned for various land use zones as part of the City's Comprehensive Zoning Ordinance.

The study area contains the following land use zones:

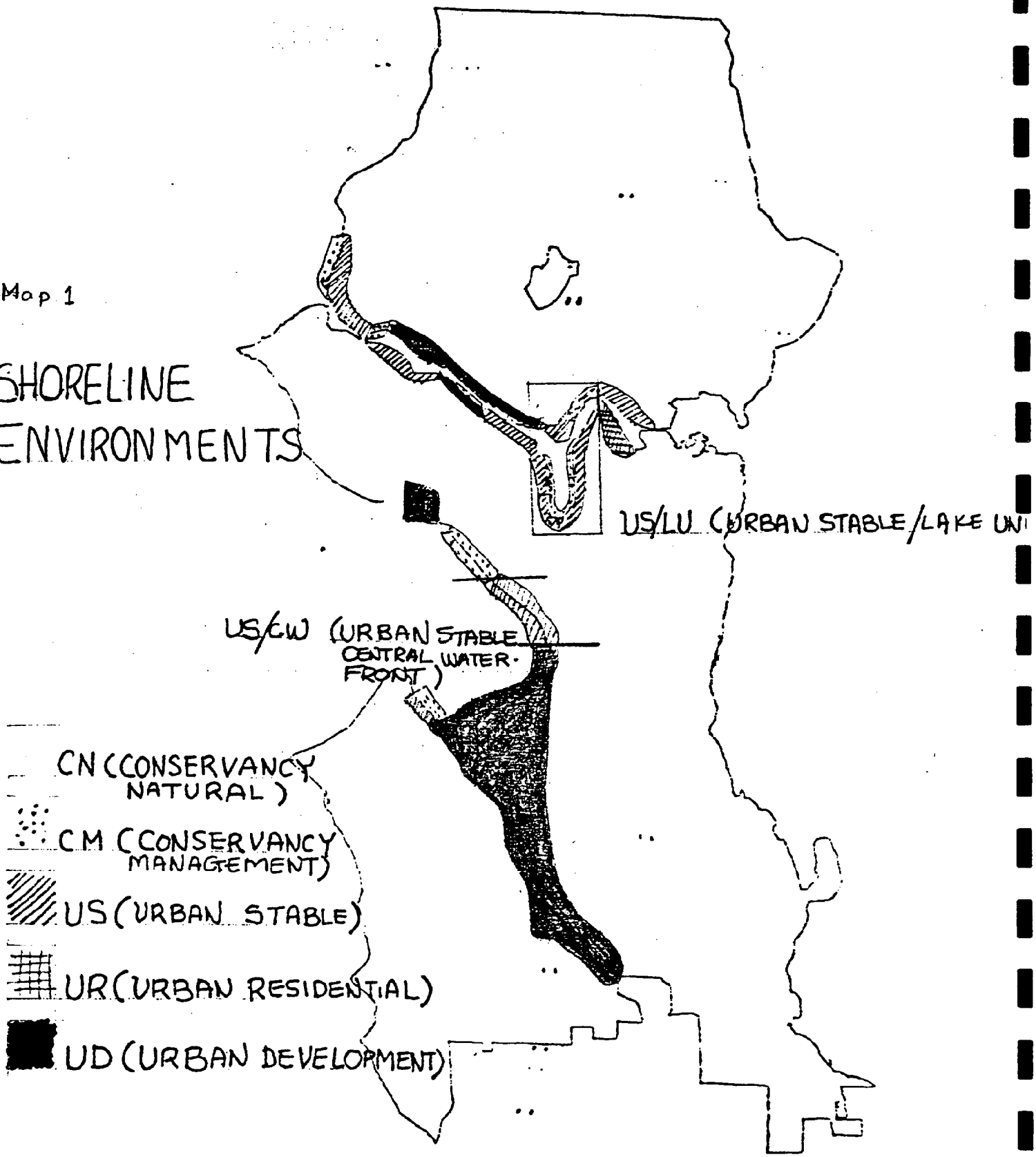
Single Family (SF))
Lowrise One (L1)) Residential Zones
Lowrise Two (L2))
Lowrise Three (L3))
General Commercial (CG)
Manufacturing (M)
General Industrial (IG)
Heavy Industrial (IH)

None of the business zones such as Neighborhood Business (BN), Intermediate Business (BI), Community Business (CM) was found in the study area. The distribution of the land use zones is approximated in Map 2.

Thus, each site in the study area has a land use zone and an overlay of a shoreline environment. We will now look at the combination of the land use zones and shoreline environments which have generated the largest number of permit applications.

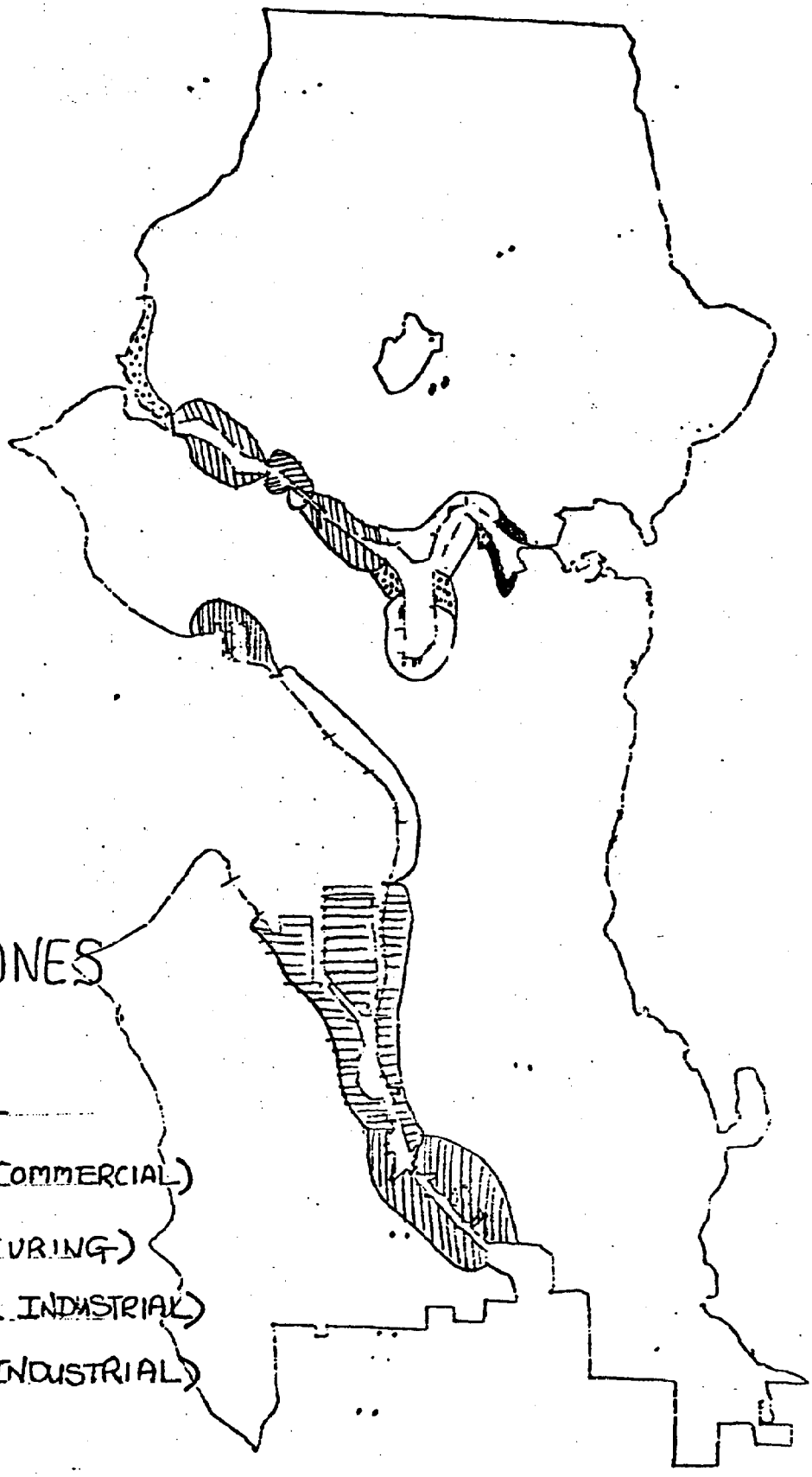
Map 1

SHORELINE ENVIRONMENTS



SCALE = 1/ 120000 ONE INCH EQUALS 10000 FEET

Map 2



SCALE = 1/ 120000 ONE INCH EQUALS 10000 FEET

TABLE 2: NUMBER OF PERMIT APPLICATIONS IN EACH COMBINATION OF LAND USE ZONE AND SHORELINE ENVIRONMENT

	CN	CM	UR	US	US/LU	US/CW	UD
SF	(1)*	(2)	6 (36)				
L1					1 (4)		
L2					(3)		
L3			1 (8)	1 (1)	(2)		
CG		2 (5)	1 (2)	23 (95)	24 (71)		
M		8 (28)		9 (28)	105 (159)	46 (50)	13 (12)
IG		(1)		20 (13)	(2)		95 (179)
IH							124 (93)

The numbers in parentheses are totals of sites with and without permit applications in the combinations.

The combinations of land use zone and shoreline environment which are particularly active in applying for permits are:

Urban Stable/Land Union (US/LU) - General Commercial (CG)
Union Stable/Central Waterfront (US/CW) - Manufacturing (M)
Urban Development (UD) - General Industrial (G)
Urban Development (UD) - Heavy Industrial (IH)

Since most zone combinations are dispersed throughout the study area, we need to look at geographical subareas in the study area for active areas also. The table below shows distribution of the permit applications by subareas.

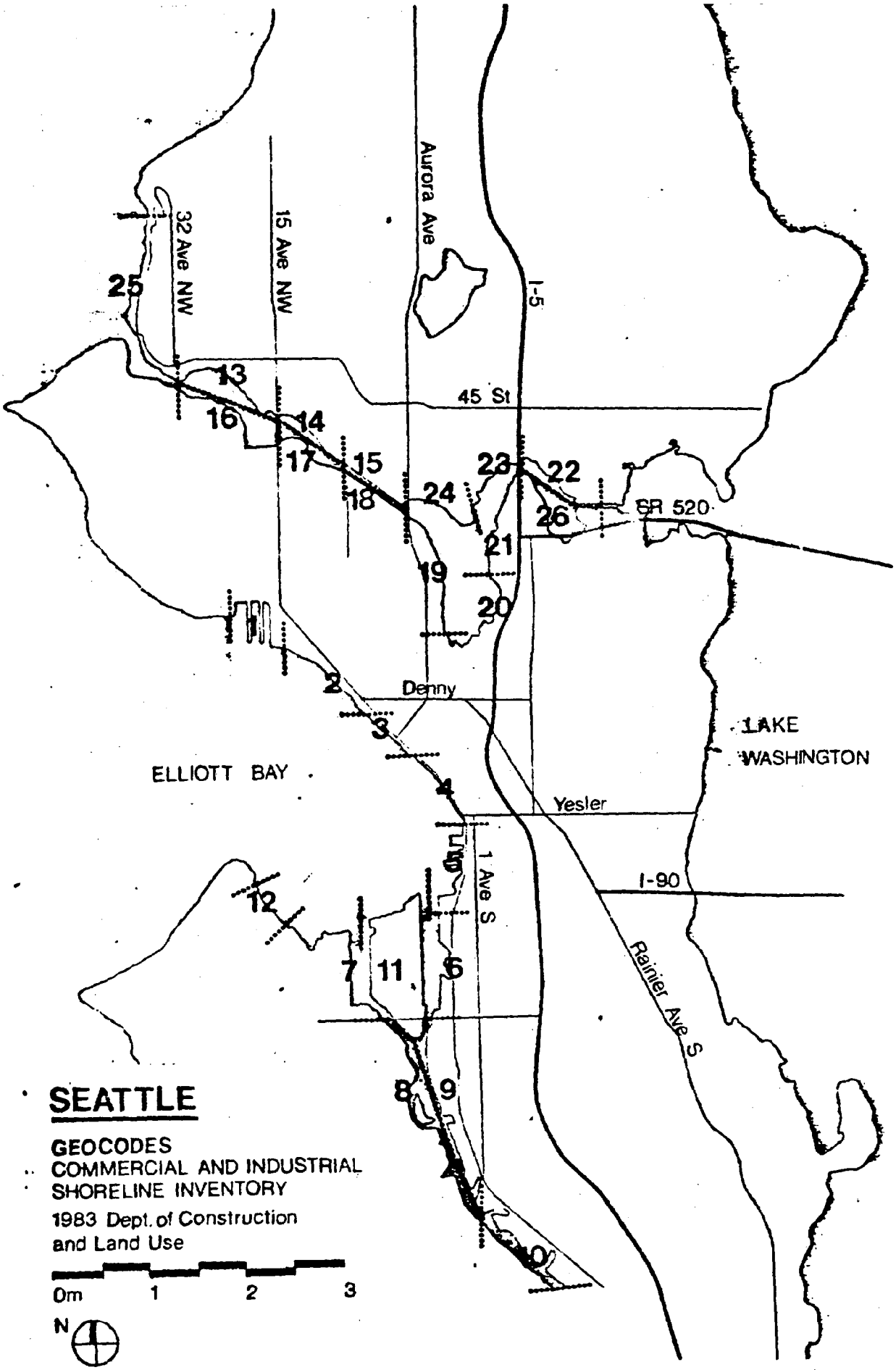

Aurora Ave
32 Ave NW
15 Ave NW
I-5
45 St
SR 520
Denny
Yesler
I-90
1 Ave S
Rainier Ave S
LAKE WASHINGTON
ELLIOTT BAY
25
13
16
14
17
15
18
24
23
22
26
21
19
20
2
3
4
12
7
11
6
8
9
10
SEATTLE
GEOCODES
COMMERCIAL AND INDUSTRIAL
SHORELINE INVENTORY
1983 Dept. of Construction
and Land Use
0m 1 2 3
N

TABLE 3: SITES WITH PERMIT APPLICATIONS

Subarea & Geocodes	# of Sites With Any Application	% of Total Number of Applications	% of Total Water Frontage Occupied By Subarea
Lake Union 19,20,21,23,24	73	33	16%
Portage Bay 22,26	12	5	5%
North side Ship Canal 13,14,15	23	10	8%
South side Ship Canal 16, 17, 18	18	8	8%
North Elliott Bay 1, 2	3	1	5%
Central Waterfront 3, 4	19	9	4%
Duwamish West Bank 7, 8, west half of 10	25	11	18%
Duwamish East Bank 6, 9, east half of 10	19	9	16%
South Elliott Bay Harbor Island 5, 11, 12	17	8	14%
Shilshole 25	11	5	4%
TOTAL CITY-WIDE:	220	100%	100%

The above data show that three subareas are particularly active with shoreline permit applications in proportion to the lengths of waterfront they occupy. Lake Union has generated 33 percent of the total applications while the area has only 16 percent of the total water frontage. Central Waterfront also shows the same characteristic at a much smaller scale.

Thirty-nine percent of the sites in the study area are upland lots. However, a very small number of applications came from the upland sites as shown in the table on the next page.

TABLE 4: UPLAND SITES AND PERMIT APPLICATION

	# of Permits for Upland Sites	# of Upland Sites	# of Total Sites	Upland as % of Total Sites
Lake Union	13	123	249	49%
Portage Bay	3	12	73	16
North Side Ship Canal	3	31	75	41
South Shore Ship Canal	6	29	51	57
North Elliott Bay	0	5	14	36
Central Waterfront	6	29	52	56
Duwamish West Bank	0	2	26	8
Duwamish East South	3	42	127	33
South Elliott Bay and Harbor Island	21	17	48	35
Salmon Bay	0	17	58	17
Total:	36	307	787	Avg. 40%

Only 11.7 percent of the upland sites have applied for a shoreline permit in the past, while 35 percent of the waterfront sites have applied for one or more permits. The total number of permit applications from the upland sites is 36, which is only 9 percent of the total permit applications. The upland sites constitute 40 percent of the study area in number of sites, but only 5 percent in lot area, indicating the small average size of the upland lots.

With recent adoption of the Fine Tuning Amendments allowing a wider range of uses, we may anticipate more permit applications on upland lots.

The following combinations of the land use zone and shoreline environment have a large percentage of number of sites in upland:

Combination of Land Use Zone and Shoreline Environment	# of Upland Sites	Upland sites as % of # of Total Sites in combination
CG - US	34	47 %
CG - US/LU	42	64
M - US	19	73
M - US/LU	71	48
M - US/CW	29	63
IG - UD	81	50

The following subareas have a large percentage of sites in upland, compared to the study area-wide average of 40 percent:

	# of Upland Sites	% of # of All Sites in Subarea
Lake Union	62	49%
North Side Ship Canal	23	41
South Side Ship Canal	17	57
Central Waterfront	22	56

V. Water-Dependence

1. How Many Water-Dependent Sites Exist Now?

One of the major goals of the Seattle Shoreline Master Program is to protect and preserve water dependent uses located on the Seattle Shoreline. In order to find how effective the Master Program has been in meeting this goal, we need to see the trend in the changes brought about by the permit activites.

The existing uses of all 787 sites in the study divide themselves into the following groups:

Water-dependent uses — 283 sites including 53 house boat moorages (36% of total, 29% without houseboats)

Non-water-dependent uses — 504 sites (64% of total)

The above set of figures indicates that less than a third of the total number of sites are non-residential water-dependent sites.

Among the waterfront sites, excluding upland lots, the breakdown of the number of sites is as follows:

Water-dependent uses — 283 sites out of total 461 sites (61% of all waterfront sites)

Non-water-dependent uses — 180 sites (39% of all waterfront sites)

The water-dependent uses occupy 70% of the linear feet of the water frontage.

2. Direction of Change in Water-Dependence in Permit Applications

To find out whether the past permit activities played a significant role in increasing or decreasing water-dependent uses, we will look at two different aspects of the permit data. One consists of numbers of granted permits grouped by year, type and subarea. The other is the details of changes in water-dependence permitted on individual sites. One hundred eleven sites applied for more than one permit, and some of these sites changed

their water-dependence more than once. Thus the number of permits changing in water-dependence will not match the number of sites changing in water-dependence. The informtion on the granted permits tells us the general direction of change in water-dependence. The information on the individual sites tells us about the changes that have taken place on one site over time, those that occurred recently and the changes the results of which have lasted for some time.

First we will look at the permits which applied for changes in water-dependence.

Three hundred forty-nine of the total permit applications were granted outright or with conditions. The changes in water-dependence of the uses that were requested fall into the following groups:

Changes In Water-Dependence of Granted Permits

New water-dependent use	36
New non-water-dependent use	18
No change in water-dependence	260
Water-dependent use to water-dependent use of another kind, such as industrial/commercial to recreational	22
Major re-development of the sites but involving no change in water-dependence	14
Total Number of Granted Permits:	349

An overwhelming majority of the permits requested no change in water-dependence.

Now we will see if new non-water-dependent uses on the granted permits outnumbered the water-dependent counterpart in any of the past 12 years in the non-residential shorelines.

TABLE 5: WHEN WERE CHANGES IN USE PERMITTED BY THE MASTER PROGRAM

Year	(1) Vacant to Water Dependent	(2) Non-Water-Dependent to Water Dependent	(3) Vacant to Non-Water-Dependent	(4) Water-Dependent to Non-Water-Dependent	(5) Net Increase of Water-Dependent Uses (1)+(2)-(3) -(4)	Total Number of Changes in Water-Dependence (1)+(2)+(3) +(4)
1971	0	1	0	0	1	1
1972	1	1	1	0	1	3
1973	1	2	0	1	2	4
1974	5	1	1	1	4	8
1975	0	3	0	0	3	3
1976	3	2	5	1	-1	11
1977	1	1	1	1	0	4
1978	2	0	3	0	-1	5
1979	4	0	2	0	2	6
1980	2	2	1	2	2	6
1981	1	2	1	0	2	4
1982	2	1	0	0	3	3
PERMIT TOTAL:	22	16	16	4	18	68

There was no specific year or years when new non-water-dependent permits outnumbered water-dependent ones in a significant quantity.

Now let us look at the subarea breakdown of the permits granting changes in water-dependence.

Table 6: Permit for Changes in Water Dependence of Granted Permits
(Waterfront and Upland Lots)

Subarea and Geocode	A New Water (1) Dependent Use		Permit for a New Non-Water (2) Dependent Use		Same In Water Dependence (3)			
	Vacant to Water-Dependent	Non-Water Dependent to Water Dependent	Vacant to Non-Water Dependent	Water Dependent to Non-Water Dependent	Water Dependent to Another type of Water Dependence	Major Development In Same Use Type	Non-Major Development Action in Same Use Type	Net Increase In Water Dependent (1) - (2) Permits
Lake Union (19, 20, 21, 23, 24)	8	5	5	0	5	6	69	8
Portage Bay (22, 26)	1	1	0	0	5	0	10	2
Ship Canal (13, 14, 15, 16, 17, 18)	3	2	4	1	4	4	54	-0-
Elliott Bay (1, 2, 5, 12)	3	0	1	0	1	2	12	2
Central Waterfront (3, 4)	2	4	2	1	3	0	15	3
Duwamish & Harbor Island (6, 7, 8, 9, 10)	4	2	0	1	4	2	91	5
Shilshole (25)	0	0	1	2	0	0	12	-3
Permit Total Grand Total 349	22	14	13	5	22	14	26	18

3. New Non-Water-Dependent Uses

In the next three sections, we will look at the details of the changes in water-dependence on individual sites. We will group the sites with changes into three types: new non-water-dependent sites, new mixed use sites with a minor water-dependent use and new water-dependent sites. We will include denied, cancelled or withdrawn permits also, since many sites have any of these permits mixed with granted permits. Sites with a single denied, cancelled or withdrawn permit are also included to show development tendency and pressure of each subarea. The sites which had many changes show only the changes significant in their direction.

First we will look at the new non-water-dependent sites. All new non-water-dependent sites had been vacant or in water-dependent use previously. Therefore, a new non-water-dependent use on a waterfront lot means a decrease in opportunity for a water-dependent use to exist.

For an analysis of the types of changes we classify all water-dependent uses that cover both entire sites and only minor portions of the sites into three groups: recreational (REC), industrial/commercial (IC) or both (BOTH). Houseboat moorages are excluded from this classification.

TABLE 7:

SITES APPLIED FOR CHANGES FROM WATER-DEPENDENT TO NON-WATER-DEPENDENT USES

GEOCODE AND SITE NUMBER	NAME	PREVIOUS USE	NEW USE	YEAR OF PERMIT APPLICATION	REMARKS
3-16	Pier 64-65	Ferry service (IC)	Remodel to commercial uses.	1977	Did not occur. Piers are Vacant
10-95	Linden Transport	Sand & gravel company (IC)	School bus parking & service yard	1977	Has taken place: subsequently added barge loading facility.
25-28	Viking Condominium	Live bait & boat rental (REC)	Condo-minium	1974	Has taken place.
25-53	Stuart's Restaurant	Yacht sales (REC)	Restaurant	1976	Has taken place.

We can conclude from this list that very few water-dependent sites became non-water-dependent since 1971.

The second source of new non-water-dependent uses is a vacant site. We will see if any vacant waterfront site has been developed into a non-water-dependent use.

TABLE 8: CHANGES FROM VACANT LAND TO NON-WATER-DEPENDENT USE

SUBAREA, GEOCODE & SITE	NAME OF PRESENT USE	NEW NON-WATER-DEPENDENT USE	YEAR OF GRANTING	REMARKS
Central Waterfront				
3-12	Port of Seattle Pier 66 Garage	Office and garage	1982	Under construction: upland
Duwamish				
7/3	Port of Seattle Pier 2	Temporary Navy Housing	1981	Waterfront Vacant land Created by Permit #261
8/8	Port of Seattle Terminal 107	Archaeological research	1978	Upland portion west of 12th Ave. S.W.
9/5	POS 106 W.	Container repair	1978	Does not abut water
10/6	Lukes Machine	Machine manufacturer	1976	upland
South Elliott Bay				
12-14 (2)	Still vacant	Multi-unit residential	1979 1981	(1) Withdrawn Upland: has (2) Cond. Grant not taken place.
Ship Canal				
18-15	Canal Park Building	Office buildings	1976	Built: upland
18-16 (2)	Stern Co.	Machine shop	1977	Built: upland
18-19	Violett Building	Office building	1978	Upland: has been built.
Lake Union				
19-28		Multi-unit residential	1978	Upland: has been built.
19-43	Vacant	Office	1976	Upland: has not happened.
19-60	Vacant	Multi-unit residential	1980	Upland: has not happened.
21-64	Multi-residential	Multi-unit residential	1977	Built: upland
21-69	Multi-residential	Multi-unit residential	1979	Upland: has not taken place

From Table 8, we can conclude that no vacant waterfront site was developed into a non-water-dependent use under the permit procedure; nearly all vacant sites were upland or not abutting water.

4. New Mixed Uses Including Water-Dependent Use as a Minor Use

Reduction in water-dependent use of a less obvious type occurs when a water dependent use of industrial/commercial or recreational type changes to a mixed use with a water-dependent use only as a minor part. We will look at the sites which have undergone this change.

TABLE: 9 CHANGE OF USE FROM WATER-DEPENDENT TO MIXED USES INCLUDING WATER-DEPENDENT USE

GEOCODE & SITE	NAME	PREVIOUS USE	NEW USE	YEAR	REMARKS
5-1	Pier 48	Ferry terminal (IC)	Add retail shops, restaurants, museums to ferry terminal (IC)	1982	First Permit expired. Second Application Cancelled. Piershed Vacant
16-13	Lockhaven	Boat repair moorage (BOTH IC & REC)	Add condominium/ retain moorage (REC), Remove boat repair (IC)	1977 grant	condominium built; boat repair was non-conforming in Residential Zone
17-1	Holiday Boat Repair	Boat repair (IC) and warehouse with moorage (REC)	Remove boat repair (IC), build office building, moorage to remain (REC)	1982 withdrawn	property purchased by Metro for Water Quality Lab
Lake Union					
20-3	NOAA	Oceanic Research (IC)	demolish building on land (IC), construct piers for marina (REC) and restaurant on land	1981 cancelled	previous use continues
20-12	Lake Union Landing Fairview Boat Yard	Boat repair Marina (BOTH IC & REC)	Add restaurant retain moorage (REC)	1982	Denied: to move the Polynesian Restaurant
20-13	Northwest Diesel Repair	Boat repair (IC)	Construct Restaurant and marina (REC)	In process	
20-25	Associated Marine Service H.C. Henry Pier	Boat repair (IC), maritime & retail service	Marina, (REC) restaurant, accessory office, retail	1982	Cond. Grant: appealed
23-19	Gasworks Marina	ship salvage yard and moorage of large ships (IC)	marina (REC) and restaurant	1976	cond'l grant: restaurant never built

The table above shows that Lake Union has experienced development pressure to convert industrial/commercial water-dependent uses into recreational uses.

Development of a vacant site into a mixed use having a minor water-dependent use is an increase in water-dependence; however it is also a loss of opportunity for development of the total site with an industrial/commercial or recreational use. We will look at what development took place in this category.

TABLE: 10 UNDER UTILIZED OR VACANT LOTS INTO MIXED USES

SUBAREA and GEOCODE	NAME	PREVIOUS USE	NEW USE	YEAR	REMARK
Ship Canal 13-12	Canal Restaurant	76-09 deteriorated foundry	restaurant & parking	1976	grant
Lake Union 20-32	Vacant 900 Westlake Ave. N.	76-52 Storage	Office building	1976/ cond'l	grant
		*79-75 Storage	retail, yacht sale, moorage	1979/ withdrawn	
		*81-225-Storage	residential, retail and moorage (REC)	In process, on hold by applicant's request	
(2) 21-60	Roanoke Reef	*179 partially constructed condominium	complete construction of condominium over water	1974	denied
		*76-51 vacant (concrete platform in water)	build moorage slips in water and parking over water	1976	grant
		*80-19 vacant (concrete platform in water)	demolish concrete pad in water and build piers for houseboats	1980	cond't grant
		*80-76 vacant (concrete platform in water)	build townhouses and parking spaces on upland	1980	grant

* Permit number listed in cases with multiple application.

Tables 9 and 10 show that converting of the existing water-dependent uses and vacant waterfront sites into mixed uses including water-dependent use as a minor use has occurred almost exclusively in Lake Union, showing high development pressure for new restaurants, condominiums or offices with a marina.

In the Ship Canal, there have been one new major restaurant and one new condominium built on waterfront, and one six-story office building first proposed and later withdrawn. These cases indicate an existence of pressure for non-water-dependent uses on the Ship Canal waterfront.

5. New Water-Dependent Uses

During the last twelve years, numerous new water-dependent uses were granted and developed under the Shoreline Master Program.

The three tables on the following pages give a picture of new water-dependent uses granted by permits. The first table, Table 11, shows the sites which were developed from vacant land into uses that were entirely in water-dependent uses. The second table, Table 12, shows the sites which had been changed from a non-water-dependent use to water dependent use entirely. The third table, Table 13, lists the sites which added a water-dependent use as a minor use on their sites.

TABLE: 11 VACANT LAND DEVELOPED INTO WATER-DEPENDENT USES

SUBAREA/ GEOCODE/ SITE	NAME	NEW USE	YEAR GRANTED
LAKE UNION			
19/41	Ferguson Yacht	yacht sales moorage, repair (WD-BOTH)	1974
20/6	Lake Washington Rowing Club, Waterway 9	shellhouse and float for rowing club (REC)	1977
20/12	Lake Union Landing	boat moorage, repair sales (WD-BOTH)	1976
NORTHSIDE SHIP CANAL			
13/4	Marco	shipbuilding, warehouse, marine storage (IC)	1978
15/21	Fremont Canal Park	waterfront linear park (REC)	1979
SOUTHSIDE SHIP CANAL			
17/18	Wright - Schuchant-Harbor Construction	construct a barge facility and assemble site for module buildings for Alaska (IC)	1975
NORTH ELLIOT BAY			
2/1	Elliott Bay Park	(a) waterfront park (REC) (b) fishing Pier	1975 1979
2/3	Myrtle Edwards Park	waterfront park (REC)	1976
CENTRAL WATERFRONT			
4/2	Pier 62-63	Seafood processing and retail firm: never developed (IC)	1974
4/27	Columbia Street right of way	Tourboat: no longer exist (REC)	1973
DUWAMISH WEST BANK			
8/7	Port of Seattle	To eliminate marina (REC) and install a stone crushing mill with a barge transportation (IC): construction of barge facility and elimination of marina denied.	1981 denied
8/8	Port of Seattle	boatbuilding yard (IC): has not begun	1982
DUWAMISH EAST SOUTH			
10/18	Marine Power	commercial vessel moorage (IC)	1981
10/36	Duwamish Waterway Park	waterfront park (REC)	1980
10/45	Marine Power	marine cargo handling facility (IC)	1974

TABLE 12: CHANGES FROM NON-WATER-DEPENDENT USES TO WATER-DEPENDENT USES

SUBAREA/ GEOCODE/ SITE	NAME	PREVIOUS USE	NEW USE	YEAR GRANTED
LAKE UNION				
20/29	Northwest Seaport	City of Seattle	Moorage & repair of historical vessel (IC	1982
19/1	AGC Building	Office Building	moorage & yacht sale (REC)	
CENTRAL WATERFRONT				
4-12	City Aquarium/ Park/Miners Landing. Pier 57-59	Shops, Restaurant & Vacant Shed	(a) Create a water-front park (REC) (b) Open moorage on southside of Pier 57	(a) 1972 (b) 1982

TABLE 13: CHANGES FROM NON-WATER-DEPENDENT USES TO MIXED USES HAVING MINOR WATER-DEPENDENT USE

SUBAREA/ GEOCODE/ SITE	NAME	NEW USE	YEAR GRANTED
LAKE UNION			
19-1	AGC Office Building	Moorage added (REC)	1972
19-25	Elk's Lodge/Green Street Restaurant	Moorage added (REC) to restaurant & lodge	1977
20-21	Saint Vincent dePaul	Moorage (REC) added to retail building	1979
CENTRAL WATERFRONT			
3-5	Ainsworth-Dunn Pier 70	(a) Visitor's moorage and (b) fishing boat charter added to (REC) retail use	(a) 1971 (b) 1980
4-20	Ivar's	Charterboat (REC) added to restaurant	1981
DUWAMISH & HARBOR ISLAND			
11-02	Spokane Street Bridge	Waterfront (REC) parks added as part of bridge construction	1980

In the preceding tables, we saw that the study area had gained eleven recreational uses compared to seven industrial/commercial ones. Lake Union gained the largest number of recreational uses.

The Duwamish and Harbor Island area has witnessed an expansion and intensification of water-dependent uses through the permit process, as shown in Table 13. Six sites have been granted permits to switch from vacant land or non-water-dependent uses to water-dependency and only one permit was granted for a change in the opposite direction. This last instance later was reversed by the addition of a barge unloading facility. Some significant increases in water-dependency resulted from expansions made by Marine Power and Equipment in three separate locations, additions to Morton Marine and work done at Port of Seattle property. Recreational sites were created with the development of the Duwamish Waterway Park, and public access in conjunction with the construction of the new West Seattle Bridge. However, the Port of Seattle has discontinued two marinas and the one major marina permit granted, on Harbor Island, has not been built. The only major permit that requested a change from vacant land to a non-water-dependent use was withdrawn.

TABLE 14: Duwamish & Harbor Island
Changes in WD toward WD

		FROM	TO
10-09	Marine power & Equipment intensification of WD-IC shipbuilding 6701 - 6823 Fox Ave S.	WD-IC	Major Redevelopment WD-IC
10-18	Marine Power & Equipment 7310-7530 8th Ave S. moorage of marine equipment	WD-IC	
10-36	Duwamish Waterway Park 1000 S.Elmgrove St. development of park	Vacant Land to park	WD-REC
10-45	Marine Power & Equipment 833 S. Chicago St. Loading ramp & deck over water - never constructed		
St. Row 11-02	New West Seattle Bridge & 2 parks East Waterway, Harbor Island	Vacant Land	WD-REC
8-8	Port of Seattle Terminal 107 4700 W. Marginal Way S.W. Small Boat Construction	Vacant Land has not developed	WD-IC

6. General Direction of Changes on Individual Sites

The preceding Tables, Tables 7, 9, 10, 11, 12 and 13, show the direction of change of water-dependent uses into or away from recreational and industrial/commercial types. A composite of the Tables, Table 15, shows the direction of change for the entire study area.

TABLE 15: NEW OR REMOVED WATER-DEPENDENT USES ACCORDING TO USE TYPE

	Recreational		Industrial/ Commercial			NET INCREASE		
	New	Removed	New	Removed	New	Recreational	Industrial/ Commercial	Both
Lake Union	5(1)*		1	1(4)*	2	5(1)*	(-4)*	2
Shilshole Area				2			-2	
Ship Canal	1		2	2		1	0	
Elliott Bay	2					2		
Central Waterfront	3		0(3)*	1		3	-1(3)*	
Duwamish & Harbor Island	2	1	3(2)*	1		1	1(2)*	
TOTAL	13(1)*	1	6(5)*	7(4)*	2	10(1)*	-2(1)*	2

1: Changes taken place.
(1)*: Permits in process, withdrawn, denied or on appeal, or projects never developed or no longer in existence.

In the past twelve years the study area has seen a net increase in water-dependent uses of the recreational type and a slight decrease in industrial/commercial uses. Lake Union exemplifies this trend: it has the largest number of new recreational uses and also the largest potential loss of industrial/commercial uses.

VII. Public Access

1. General Public Access by Field Inventory

One of the goals of the State Shoreline Management Act is to provide public's access to the state's shoreline. The Seattle Shoreline Master Program requires that all private, non-water-dependent uses, floating home moorages, marinas and all public properties provide regulated public access. An exception is made for water-dependent uses in harbor areas leased from the state outside the Central Waterfront.

The Seattle Shoreline Program means the following by the term, "regulated public access": provision to the public by an owner, by easement or other legal agreement, of substantial walkways, corridors, plazas, transient moorage, or other areas serving as

a means of view and physical approach to public waters, and limited as to hours of availability, types of activity permitted, location and area.

The field inventory of the entire study area showed that 71 sites out of the 461 sites that front the water provide a public access. These sites occupy 3,776 feet or 20 percent of the waterfrontage. These figures include both the sites which were required to provide a public access under the substantial development permits and those which provide public access voluntarily or informally.

TABLE 16: SITES WITH PUBLIC ACCESS

Subarea		Number of Water Front Sites With Public Access*	Number of Water Front Sites Without Public Access**	Total Number of Waterfront Sites	% of Total Providing Public Access
Lake Union	19	1(7)	27(2)	37	22%
	20	1(5)	13(2)	21	29
	21	2(8)	30(3)	43	23
	23	1(6)	11(2)	19	37
	24	2(3)	10(1)	16	31
Portage Bay	22	0(3)	12(1)	16	19
	26	3(2)	33(5)	43	11
North Shore Ship Canal	13	3(0)	14(3)	20	15
	14	0(1)	14(5)	20	5
	15	0(0)	9(2)	3	0
South Shore Ship Canal	16	1(0)	7(1)	9	11
	17	0(0)	11(0)	11	0
	18	1(0)	1(0)	2	50
North Elliott Bay	1	2(0)	1(0)	3	67
	2	2(2)	0(0)	4	100
Central Waterfront	3	0(4)	6(0)	10	40
	4	4(1)	6(2)	13	38
Duwamish West Bank	8	2(0)	9(3)	14	14
Duwamish East Bank	9	0(0)	17(2)	9	0
	10	2(0)	40(11)	53	4
South Elliott Bay and Harbor Island	5	1(0)	3(1)	5	20
	11	0(1)	15(3)	19	5
	12	1(1)	3(2)	7	29
	6	0(2)	7(1)	10	20
	7	2(0)	8(2)	12	17
Shilshole	25	6(1)	32(1)	40	18

* Streetends and waterways providing public access in parentheses
** Streets and waterways not providing public access in parentheses

2. Regulated Public Access Under the Shoreline Master Program Permits

The Seattle Shoreline Master Program required the privately owned sites shown in Table 17 to provide regulated public access under the substantial development permits issued on them.

Table 17: Private Sites Required to Provide Regulated Public Access

Name of Site	Address	Inventory Geocode	Fresh/ Salt Water	Regulated Public Access**
Trident Import and Harbour Cruise (Pier 55-56)	1101-1205 Alaskan Way	4-17	S	Yes
Richardson and Holland	6901 Fox Ave S	10-11	F	Yes
Canal Restaurant	5240-5476 Shilshole NW	13-12	S	Yes
Lockhaven Condo	3100 W Commodore Way	16-13*	F	Not yet
Canal Place Offices	100-117 Nickerson	18-17	F	Yes
AGC Building	1200-1226 Westlake N	19-01	F	Not yet
Union Bay Sports	1842-1846 Westlake	19-21	F	Yes
Martin Marine	2900 Westlake	19-65	F	Yes
Abigail's Restaurant	1114 Valley	20-26	F	Yes
Lake Union Landing	1135-1199 Fairview N	20-12	F	Not yet
Lakeside Restaurant	2501 N. Northlake Way	23-09	F	Yes
Ivar's Salmon	4011 N. Northlake Way	23-3	F	Yes
Marine Power	1341-1455 N. Northlake	24-3	F	Yes
Hirams Restaurant	5300 34th Ave NW	25-03	S	Partially Not yet
Viking Condo	5701 Seaview NW	25-28	S	Yes
Rays Boathouse	6049-6055 Seaview NW	25-43	S	Yes
Elks Lodge	6501-6519 Seaview NW	25-57	S	Yes
Shilshole Point Condo (Arrowhead Condo)	6321 Seaview NW	25-56*	S	Not yet
Stuart's Restaurant	6201 Seaview NW	25-53	S	Yes
Boyer Associates	2700 Boyer E #7902	26-9	F	Yes
Houseboat Grant Austin	1215 E. Allison	26-23	F	Yes
Sea Scouts WW18	2253 N Northlake Way	23-16	F	Yes

* Under Construction
** Present as of August 1982

The Shoreline Master Program also requires public access on all publicly owned property even where developed with water-dependent uses. The table below shows the public sites which provide regulated public access under the Master Program.

TABLE 18: PUBLIC SITES WITH REGULATED PUBLIC ACCESS

NAME OF SITE	INVENTORY GEOCODE	FRESH/SALT WATER
Pier 91	1-1	S
Pier 86	2-1	S
Myrtle Edward Park	2-3	S
Seattle Acquarium	4-12	S
Washington Street End	4-33	S
Pier 48, Alaska Highway	5-1	S
Kellog Island	8-8	Mix
Terminal 115	8-13	Mix
Duwamish Waterway Park	10-36	F
Don Armeni	12-01	S
Central Seattle Community College	14-22	F
Port of Seattle Fishermen's Wharf	16-02	F
South Passage Park	21-01	F
North Passage Park	22-01	F
Gasworks Park	24-01	F
Shilshole Marina	25-59	F
E. Allison Street End	27-08	F

One thing to note is that public access in the form of parks, fishing piers and street ends in the Central Waterfront are highly visible to the public, readily accessible by public transportation to a large number of people, and large in size in comparison to any other subarea. In addition, the Central Waterfront has four semi-public accesses: Ainsworth Pier, Curiosity Shop, Ivars and Sea Galley, where the public uses the access easily as customers of the businesses on the piers or as general public with little restriction.

3. Street Ends and Waterways

There is a total of one hundred and two street ends and waterways in the study area and they provide numerous public access opportunities. The principal use of the street ends and waterways fall into the following groups:

Street right of way	79
Parks	6
Marine repairs or services	3
Open water	3
Construction service	2
Floating homes	1
Marine Craft Transportation	1
Government service	1
Educational service	1
Sports-Recreational area	2
TOTAL	102

The secondary uses of the street ends fall into the following groups. Some street ends have up to four secondary uses:

Street right of way	21
Automobile parking	7
Marinas	5
Moorage for commercial crafts	3
Open storage of material	3
Vacant buildings	1
Unused and undeveloped	23
Open water	41

The one hundred and two street ends and waterways divide themselves into 78 water-dependent uses and 23 non-water-dependent uses. Forty-six had public access. The breakdown of the street ends and waterways according to subareas is as follows:

Subarea	Street Ends With Public Access	Street Ends Without Public Access
Central Waterfront (1, 2, 3, 4)	7	2
Dwamish Waterway Harbor Island (5, 6, 7, 8, 9, 19, 11, 12)	4	24
Ship Canal and Shilshole (13, 14, 15, 16, 17, 18, 25)	2	13
Lake Union and Portage Bay (19, 20, 21, 22, 23, 24, 25)	33	17

The public accesses provided by the street ends and waterways are not required by a shoreline permit with the exception of E. Allison Street End.

A total of seven permits were issued on five street ends and two waterways as shown below:

Street End/Waterway	Proposal on Permit
Pier 2-63	Fish store
Columbia St. r.o.w.	ticket booth for tour boats
S Spokane St. r.o.w.	Spokane Bridge 2 mini-parks
Waterway 9	Float for rowing club
Waterway 4	Center for Wooden Boats
North Passage Point	Park
Waterway 18	Sea Scout float

IX. Development Activities Under the Permits

1. What Development Activities are Proposed on Permits

A tabulation of the first of the three permit applications on the two hundred and twenty sites which have applied for permits shows that the most frequent type of development activity is construction of a building or accessory facility on land. The second prominent activity type is construction of piers. Following closely behind in frequency is construction of other facilities including addition or remodelling of building all in or over the water.

Table 19: Number of Sites Proposing Development Activities

First Permit Application only

Water Dependence Change	Total Sites	Dredge	Fill	Construct Pier	Demolish Pier	Demolish Land Structure	Demolish Over-water Structure	Construct Structure Onland-Waterfront Sites	Construct on Upland	Construct Over Water	Other
Vacant to Water Dependent	15	0	1	7	0	0	1	7	0	4	4
Vacant to Non-water Dependent	13	1	1	1	0	1	0	6	7	1	0
Major Redevelop-ment of Site (No chanote in use)	8	2	2	3	2	2	1	3	1	3	1
Water Dependent to Non WD	4	0	0	0	1	2	0	2	0	2	0
Non WD to WD	12	1	1	7	1	2	1	6	1	0	0
WD to WD of different type	17	2	2	5	0	2	0	11	1	5	1
No Change in Water Dependence	150	16	15	35	4	7	1	64	13	40	14
TOTAL	220	22	22	58	8	16	4	99	23	55	20

2. Development Activities of Selected Sites

In order to follow various developments under the permits in chronological order, we have picked a few water-dependent sites which applied for many permits to show the types of activities they propose to do. The first such illustration is a group of ship building industries, all of which had more than six permits. What is common to all the shipbuilding sites is extensive work in the water, dredging, filling, constructing piers and wharfs, bulkheads and ripraps.

Shipbuilding businesses

SUBAREA	SITE SIZE WATER IN SQ. FT.	SITE SIZE LAND	# OF PERMITS
South Elliott	1,374,000	1,155,000	11

1972 - Development activity applied for; dredge and widen channel, build new bulkhead. 1976 - Dredge 10,000 cu. yds. 1977 - Dredge 50,000. 1977 - Construct temporary building on land. 1979 - Repair riprap. 1980 - Dredge 60,000 cu. yds. 1980 - Construct dolphin. 1981 - Construct a pier and dredge 40,000 cu. yds. 1982 - Dredge. 1982 - Build a ramp over water. 1982 - Add to craneway over water.

Harbor Island	945,900	926,300	8

1973 - Construct launching ramp in water. 1974 - Construct a launching ramp in water and remove an old building on land. 1978 - Construct a building over water. 1980 - Construct 2 buildings on land and one over water. 1980 - Demolish a pier in water, fill, build a bulkhead, build a pier, build a shop on land. 1981 - Building electrical building over water. 1981 - Demolish an old pier and build a new one. 1981 - Build a storage and work room on land.

Ship Canal	20,400	254,600	6

1974 - Build a machine shop on land. 1974 - Demolish a dock in water and build a shop over water. 1975 - Build 3-pile dolphins. 1977 - Demolish all sawmill buildings. 1978 - Dredge, build bulkhead, pave on land. 1982 - Demolish part of overwater warehouse, dredge, building on a wharf.

NOTE: The site remained unused as shipbuilding business until after 1978.

Duwamish	160,000	614,000	6

1979 - Build a pier and a drydock in water, dredge and build riprap, pave on land. 1979 - Install dolphins and remove old ones. 1980 - Dredge (withdrawn since not needed). 1977 - Fill, dredge, construct a wharf, a pier and riprap. 1977 - Pave on land, build accessory storage and office building on land. 1982 - Build dolphins.

The next group of sites to look at is the Port of Seattle properties. The permit applications show the skeletal frame of the recent historical changes in most of the Port's piers and terminals.

GEOCODE	NAME	# OF PERMITS	YEARS AND ACTIONS
1-1	Terminal 91 Cargo cold storage, oil bulk terminal	5	1973 - building longshoremen's lunchroom. 1974 - demolish building on land, pave for freight. 1976 - provide public access road on land, pave land for auto handling. 1977 - fill, pave over track over water. 1980 - construct concrete float for moorage.
2-1	Terminal 86 Grain terminal, park, cargo storage	2	1975 - landscape Elliott Bay Park. 1979 - construct fishing pier and reef in water.
3-13	Pier 66, Port Office, fish processing, parking	3	1974 - construct a berthing facility for a cruise ship. 1978 - build an elevator in Port Office Building. 1980 - build a garage on land with office use on upland and major renovation and development of a large commercial comples in the Port Building on Pier 66.
3-16	Pier 64/65, vacant	1	1977 - remodel pier building over water.
5-1	Pier 48, ferry terminal, warehouse	3	1977 - renovate building on pier. 1979 - install construction trailer for office in process; remodel interior of building for restaurants, shops, museum, ferry terminal.
5-3	Terminal 46, cargo terminal	6	1976 - construct a building on land. 1977 - demolish timber apron on pier, demolish buildings on pier, fill, build bulkhead and riprap. 1979 - construct buildings. 1980 - construct buildings. 1981 - build a small building on land. 1981 - repair bulkhead, dredge, fill, riprap.

5-4	Terminal 37, cargo, warehouse	2	1976 - fill. 1978 - construct 4 buildings on land.
6-7	Terminal 30, cargo, warehouse, storage	3	1973 - relocate office and shed, add utilities. 1976 - improve pier 28. 1977 - demolish building and fill the slip.
6-10	Terminal 25, cargo, fish process, cold storage	2	1973 - build a 2-story yard office building on land. 1977- build a maintenance building on land.
7-3	Pier 2, rail barge, temporary housing, parking	2	1975 - fill, build a rail ramp in water, pave for freight yard on land. 1981 - build temporary housing for Navy on land.
7-7	Terminal 5, Sealand, Salmon Terminal, Tug & Barge, radio station	3	1976 - remove conveyors and cranes on land, build mooring dolphins, build parking area and ramp for import cars on land. 1978 - fill and dredge to regrade in water, construct concrete platform over fill on land.
8-7	Terminal 105, cargo, warehouse, sandblasting, painting	1	1981 - construct a mill and warehouse on land and an unloading facility in water for a stone crushing mill. Demolish existing Marina. Permit cancelled by applicant.
8-8	Terminal 107 (Kellog Island)	3	1975 - fill in water to correct bank (withdrawn). 1978 - archaeological study. 1982 - remove trees and establish boat construction shelters and utlity.
8-13	Terminal 115, cargo terminal, freeze warehouse, tug base, fish processing	8	1973 - construct a boathouse in water. 1973 - build a guard house on land. 1974 - demolish buildings on land, fill in water, pave on land. 1978 - construct a fish processing plant on land, dredge, put in riprap, build 80-space parking area on land. 1978 - expand plant on land, move office building on land. 1979 - build a pier, dolphins, riprap, dredge. 1979 - build a stairway.
9-5	Terminal 106W (container storage)	1	1972 - build a warehouse and manufacturing plant on land (withdrawn).
11-01	Terminal 102 (marina)	1	1980 - dredge, consruct a pier, construct a building on land. Construct a ship marina.

11-4	Terminals 18 & 20 Container cargo, mixed cargo, liquid cargo (mollasses, tallow, petrochemicals)	7	1973 - demolish building on land, dredge in water, fill in water, build bulkhead. 1973 - demolish buildings on land, dredge, fill, build bulkhead. 1974 - relocate 2 buildings on pier. 1979 - remove all structures, tanks, pipes, ect. from land area. 1980 - fill on land, build office buildings on land. 1981 - relocate two buildings on land. 1982 - container terminal; demolish pilings, apron, dredge, fill, build a new pier, demolish buildings over waer, construct new buildings on pier.
11-5	Pier 17, Tug and Barge Co.	4	1975 - add to office building on land. 1976 - add to shop building on pier, add to building on land. 1979 - add pipes to dock, build tank on land. 1982 - extend pier, expand building on pier.
11-6	Pier 16, rail barge terminal, Navy mess hall	3	1976 - remove buildings on land, build bulkhead, fill in water, build office and parking garage on land. 1976 - remove old dolphins and build new ones. 1978 - renovate buildings to Mess Hall and build 3 portables on land.
16-2	Fishermen's Terminal	9	1973 - develop parking area and restroom on land. 1977 - extend pier. 1977 - build a pier, add lighting and drainage on land. 1978 - remove buildings on land and construct new ones. 1978 - dredge. 1978 - buid a pier and dolphins. 1979 - modify. 1978 - permit on pier. 1980 - build camel and pilings. In process: drive in piles.
25-59	Shilshole Marina Marina, restaurant, boatyard, boating retail boutique		1972 - add to restaurant on land. 1978 - add floating piers. 1973 - construct entrance sign on land. 1975 - add to floats in water. 1980 - temporaroy trailer on land. 1980 - add to floats in water. 1982 - redesign parking lot.

A look at the fish processing firms shows that they also engage in development of the waterfront facilities, such as piers, wharfs, dredging, and bulkheads.

Geocode	Name	# of Permits	Year and Action Requested
13-1	Searun Seafoods Site contains boat moorage	1	1979 - construct moorage for 10 commercial boats
16-7	Whitney Fidalgo Site contains moorage of fishing boats	2	1973 - add cold storage and seafood processing plant on land 1974 - add office on land
17-18	Washington Fish & Oyster	3	1975 - build bulkhead and loading dock in water (for previous use, module building for Alaska) 1977 - construct three seafood processing buildings, extend wharfs and build a new pier 1980 - add a wharf, dredge, build a processing building on land
23-15	Peter Pan Offices, storage, boat repair, all related to fishing		1977 - remove pier and construct a larger pier 1977 - construct a warehouse on land 1979 - construct a bulkhead and fill behind
23-17	Alaska Pacific Salmon Offices, storage, boat repair, all related to fishing		1976 - build a wharf, a pier and dolphins 1977 - build a bulkhead, demolish warehouse building on land (withdrawn) 1979 - build a dock for fishing boats
21-42	Bumble Bee		1978 - convert a warehouse to office space and add 14 parking spaces

Restaurants on the waterfront are prominent in the public's view. The table below shows the permit activities of the restaurants on waterfront lots.

Geocode	Name	Permits	Year and Development Activity
4-20	Ivar's	4	3 permits denied or cancelled 4th in process to add new restaurants on the pier
13-12	Canal Restaurant Site contains Honeywell Marine Systems Center, Stimson Marina	2 on restaurant (2 others on other uses)	1972: demolish warehouse building and construct parking area. 1976: demolish 3 buildings, construct 350-seat, 47-foot high restaurant
19-3	Latitude 47 Site contains moorage and restaurant	4	1973: construct covered moorage in water 1975: cover deck with glass, extend dining area of restaurant 1976: enclose deck of restaurant 1978: enclose deck with glass (denied) 1981: expand restaurant (denied by Department of Ecology)
19-10	Franco's Hidden Harbor	1	1975: renovate and remodel, add a dining room, add to or dining deck
20-26	Abigail's	1	1976: construct restaurant on land, public dock over water.
23-9	The Lakeside	1	1963: built 1972: parking variance 1977: provided regulated public access in street end 1979: remodel restaurant
25-3	Hiram's	1	1973: demolish structure over water, construct restaurant.
25-43	Ray's Boathouse Restaurant and boat rental	2	1977: remodel restaurant over water 1982: demolish shed over water
25-53	Stuart's	1	1976: improve bank, remove existing pier, construct restaurant on land, provide public access
25-41	Acapulco	2	1978: expand restaurant over water (denied) 1979: construct guest moorage floats and dredge

Table 20: Central Waterfront Permit Activities

Geocode	Checked if no Permit Application	Name	Use at time of permit application	Permit #	Activity proposed	Decision
3/1		Union Oil Co. Pier 71	- Vacant except for railroad right of way	80-93	To construct a large lid over the railroad tracks to hold a tennis court, open spaces, walkway and restaurant/recreation building above 650 ft. long 115 ft. wide and 35 ft. high	cont'd grant 1981 not started yet
				81-0388	Demolish existing pier 71, build pier for moorage for 200 boats surrounded by fixed breakwater	on hold
3/2		Upland Site Shakey's Pizza			One permit to remodel	
3/3	x	Upland Site Spaghetti Factor				
3/4	x	Broad Street Row - Ship moorage				
3/5		Ainsworth and Dunn - Pier 70				
			Retail shops and restaurants in the Pier shed, parking on the north side open deck of the pier and 2nd floor of building	5	to build a floating dock and raised deck for visitors boat moorage	1971 grant float built, no deck built
			Add a fishing charter business on the south side of the pier	80-13	to build access platform, ramp and float for moorage of fishing charter	1980 cond'l grant built
				82-0172	to build a fastfood restaurant on the east edge of the north open deck	1982 denied cond'l use-not meeting program intent

Geocode	Checked if no Permit Application	Name	Use at time of permit application	Permit #	Activity proposed	Decision & Year
3/6		British Columbia Steamship Co., Pier 69	Can manufacturing	301	To construct a loading platform for trucks for American Can Manufacture	1975 granted
			Vacant			
				76-44	to remodel pier shed into a ferry terminal with a res-	grant 1976
			Princess Marguerite Ferry Company	76-80	aurant, to drive dolphins, build a gangway to ferry terminal	grant 1980
3/7		Upland - Seattle Trade Center	One permit to remodel from a factory to trade center			
3/8	x	Vine St. end				
3/9	x	Upland Sky Luggage				
3/10		Edgewater Inn Pier 67-68	Edgewater Inn Hotel Restaurant Accessory Parking area	80-71	to expand office space inside the motel structure	cont'l grant-1982
3/11	x	Battery Street end				
3/12		Upland - Pier 66 Garage	Parking garage - one permit for construction and office building under construction	206	to construct a cruise ship berthing facility on the south side with automobile transfer bridge, 2nd story promenade deck, to replace timber apron with a new wharf on the north half of the west side.	grant 1974
3/13		Pier 66	Port of Seattle - port office, 3 fishing processing companies, parking,			
				76-68	Structural renovation for the Port	grant 1976
				79-77	To renovate the southern portion of the shed to have a restaurant, retail office complex, with a pedestrian bridge connecting to a new garage across Alaskan Way	grant 1980

Geocode	Checked if no Permit Application	Name	Use at time of permit application	Permit #	Activity proposed	Decision & Year
4/1	x	Upland site - Tident Imports		199	Pier 62 - repair existing and extend its length to accommodate shops and restaurants	grant 1974
4/2		Pier 62-63	Vacant		Pier 63 - repair the pier and place a fish processing plant, office, public facilities and public pier area	
4/3	x	Upland site - warehouse				
4/4	x	Upland site - Seattle Aquarium	Storage			
4/5	x	Vacant - former Pier 61				
4/6	x	Upland parking lot				
4/7		Upland site - a permit granted in 82 to convert a warehouse to office, showroom, warehouse				
4/8	x	Upland site - office/restaurant				
4/9	x	Upland site - stores				
4/10	x	Upland site - Olympic Storage				
4/11	x	Upland - steam plant				
4/12		Aquarium, Waterfront Park, restaurant, Pier 57-59	Vacant	93	Pier 58 - to demolish structure and pier and to construct a waterfront park on pier	grant 1972
			fishing processing plant	188	Pier 59 - to construct aquarium	grant 1974
				246	To moor San Mateo, a Historic Boat in University Street R.O.W.	
				274	To remodel shops on Pier 57	grant 1975

Geocode	Checked if no Permit Application	Name	Use at time of permit application	Permit #	Activity proposed	Decision & Year
				299	To change office to shops in the warehouse of Pier 59	grant 1976
				81-0492	To build on access ramp and float with pilings for open wet moorage adjacent to the south side of Pier 57 for a fishing and tourist boats	cond'l grant 1982
3/14						
3/15	x	Upland site				
3/16	x	Upland site Port of Seattle Pier 64-65	Vacant Pier 65 New England Fish Company Pier 64 Ferry Service of B.C. Steamship Company being relocated to Pier 69 (Vacant now)	76-78	to remodel Pier 64 building to house 15,000 sq. ft. of mixd commercial uses and to remove loading ramps used for locating B.C.S. boats. Parking to be provided across Alaskan Way by demolishing the building of Washington Ice & Cold Storage Company.	granted 1977 nothing has happened
3/17						
3/18	x	Upland site - distributors warehouse		76-78	Revision - Pier 64 to renovate sub-structure and pilings extensively, to increase floor area to 40,000 sq. ft. of commercial use.	denied 1979
3/19	x	Upland site - Parking lot Upland site - Virginia Street end				

Geocode	Checked if no Permit Application	Name	Use at time of permit application	Permit #	Activity proposed	Decision & Year
4/13	x	Upland Site				
4/14	x	Grayline Tours in University Street end				
4/15		Upland Site - Permit granted in 1980 to convert a warehouse into office/restaurant/shop mix				
4/16	x	Upland Site - Olympic Cold Storage				
4/17		Pier 55-56				
		Trident Imports	Pier 56 - Trident Imports, Aquarium (a private business) and restaurant	241	to remodel Pier 56 to house restaurant	grant 1975
		Fisheries Supply	Charter boat and office	76-15	Pier 56 - to remodel to restaurant on pier	granted 1976
			Restaurant, office, shops, charter boat	79-06	Pier 55 - to renovate	cont'l grant 1980
				80-81	Pier 55 & 56 to remodel buildings over piers and new pier float	grant 1982
				82-0314	to expand the buildings	in process
4/18	x	SS Virginia Frankfurter				
4/19	x	Upland Site - parking lot				

Geocode	Checked if no Permit Application	Name	Use at time of permit application	Permit #	Activity proposed	Decision & Year
4/20		Pier 54 - Ivars	Restaurant and fish processor	52	to add a public access deck in Madison Street R.O.W. to restaurant	denied 1972
				295	to add a pool, on the south side of pier 54, deck roof, the south side of Pier 54 deck roof, fish market and a cafer on the north side of Pier 54	denied 1975
				77-37	Add to office space	granted 1977
			restaurant and warehouse	80-58	construct a public access deck over water	cancelled 1980
				81-14	to build an access ramp and a float for moorage of fishing charters	cond'l grant 1981
				81-420	Second story addition	cancelled
				83-0031	Two fast food restaurants restaurant, office, boat moorage, boat storage, retail, private club	in process
4/21	x	Upland Site - Corner Stone				
4/22	x	Seattle Fire Dept.	Madison Street end Fire Station	82-0181	to remove 2 dolphins in stall 10' x 152' mooring float with accessory ramp	cond'l grant 1982

Geocode	Checked if no Permit Application	Name	Use at time of permit application	Permit #	Activity proposed	Decision & Year
4/23	x	Upland Site - Maritime Building				
4/24	x	Upland Site - Commuter Building				
4/25	x	Upland Site - Colman Garage				
4/26	x	Washington State Ferry Terminal				
4/27		Columbia Street ROW	Vacant	122	to build ticket booth ramp and float	grant 1971
4/28	x	Upland Site - Polson Building				
4/29	x	Upland Site - Parking lot				
4/30		Ye Olde Curiosity Shop	retail shop restaurant parking area	1	to extend pier and expand building on pier and provide moorage	
4/31	x	Upland Site - Yesler Way				
4/32	x	Pier 50	Vacant			
4/33		Washington St. Boat Landing and park	Vacant	109	to build a public boat mooring pier	grant 1973

DATE DUE

GAYLORD No. 2333			PRINTED IN U.S.A.

NOAA COASTAL SERVICES CENTER LIBRARY
3 6668 14108 2133