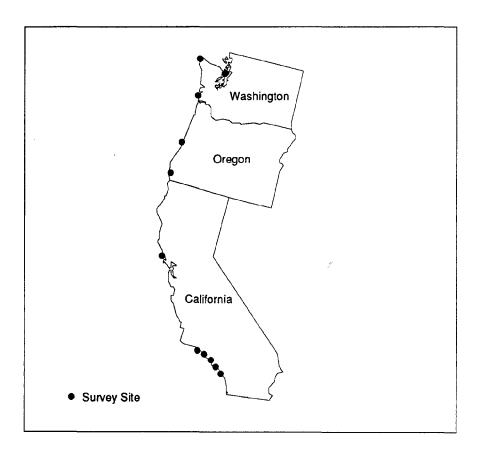
Public Area Recreation Visitors Survey

A Socioeconomic Profile of Recreationists at Public Outdoor Recreation Sites in Coastal Areas: Volume 5

Vernon R. Leeworthy, Daniel S. Schruefer and Peter C. Wiley June, 1990



U.S. DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration



Coastal and Ocean Resource Economics Program

The Coastal and Ocean Resource Economics Program is an evolving set of activities to develop Nationwide data bases, products and analytical capabilities for conducting economic assessments of activities that directly affect or are affected by the health of the nation's coastal and oceanic resources. The program is conducted by the Strategic Environmental Assessments Division (SEAD) of NOAA's Office of Ocean Resources Conservation and Assessment. It's major program elements are described below. Since 1985, the program has also co-sponsored a set of annual workshops with the Environmental Protection Agency on natural resource and environmental economics to support it's major program elements.

Inventory and Value of Coastal Recreation. Because outdoor recreation has been identified as the single largest category of benefit from the improvements in water quality, SAB began to develop a program to inventory and value coastal recreation. The first product of this program was a data base and report "Public Expenditures on Outdoor Recreation in the Coastal Areas of the U.S.A. (1986)" This led to development of an inventory of all publicly owned and/or managed recreation areas and facilities in the Nation's coastal areas. Summaries for 21 states and 25 groups of estuaries, by county and level of government, are available in a recently published atlas titled "National Estuarine Inventory, Data Atlas: Public Recreation Facilities in Coastal Areas (1988)." A complementary inventory of all privately owned and managed recreation facilities is also being developed through a cooperative agreement between NOAA and the U.S. Forest Service. Plans are to complete this inventory, Coastal Recreation Inventory, in 1992.

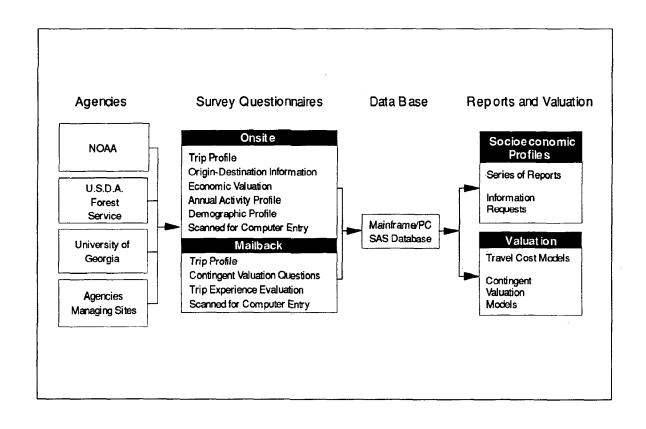
Public Area Recreation Visitors Survey (PARVS). PARVS is an ongoing intergovernmental cooperative research project involving seven federal and twelve state agencies. The survey was designed to provide data needed to develop highly credible and broadly comparable estimates of the economic importance of providing recreational opportunities on public lands. PARVS also enables development of detailed information about recreation uses and users and can provide estimates of the direct monetary value derived by users of public recreation areas. User values are critical to analyses of conflicts and trade-offs between recreation and other resource uses. In 1987, SAB initiated the effort to collect data at coastal recreation sites. To date, more than 15,000 interviews have been conducted at forty public outdoor recreation sites in the coastal areas of the U.S.A.

For more information on NOAA's Coastal and Oceanic Resource Economics Program, write to:

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Contents

Page

Introduction	•••••••••••••••••••••••••••••••••••••••	1
Survey Desig	n	1
Profile of Vis	itors	1
Type and Ex	tent of Activities	3
Spending by	Visitors	4
Willingness-	to-Pay	4
Satisfaction	Ratings	. 5
On-going an	d Future Activities	. 6
Footnotes		6
References		. 7
Figures and	Tables	. 9
Figures	•	
1.	Recreation Sites Surveyed During the Winter-Spring 1989	10
2.	U.S. Bureau of the Census Regions and Divisions of the United States	11
Tables	•	
1.	Managing Agencies and Number of Completed Interviews for the	
_	1989 PARVS Coastal Sites	12
2.	Distribution of Visitors by Census Division or Country of Residence	12
3.	Distribution of In-State and Out-of-State Visitors, by Site	
4.	Average Distance Traveled to the Six Coastal Sites	
5.	Age Distribution of All Visitors by Site, Compared to the States	
_		16
6.	Gender and Racial Composition of All Visitors by Site, Compared	
7.	to the States and the U.S.A	17
••	by Site	18
8.	Distribution of Family Income of Visitors by Site, Compared to	
_		19
9.	Distribution of Visitors by Group Size	
10.	Distribution of Visitors by Group Type	21
11.	Average Annual Number of Days on Site and Trips to the Site, and	22
12a.	the Average Length of Stay on Site for the Interview Trip Ranking of the Top Ten Main Activities of Visitors Age 16 and	22
1 4 G ,	· · · · · · · · · · · · · · · · · · ·	23

Contents (continued)

Tables (c	continued)	Page
12b.	Ranking of the Top 15 Activities of Visitors of All Ages	24
13.	Average Daily On-site Fees and Trip Expenditures Per Person	25
14.	Maximum Willingness-to-Pay for an Annual Vehicle Pass for the Interview Site Versus Any Site the Agency Manages	26
15.	Willingness-to-Pay Randomly Assigned Dollar Amounts - On-site Survey	
16.	Willingness-to-Pay for Annual Vehicle Pass to Site: Randomly Assigned Dollar Amounts - Mailback Survey	
17.	Satisfaction Ratings for Recreation Experience at the Site	29
18.	Satisfaction Ratings- Number of Other Visitors at the Site	
19.	Satisfaction Ratings on Cleanliness of Facilities	31
20.	Satisfaction Ratings on Parking	32
21.	Satisfaction Ratings on Water Quality	33
22.	Satisfaction Ratings on Overall Condition of the Site	34
. . .		
Appendix A:	Site Profiles	35

(List of Coastal and Ocean Resource Economics Program Publications on inside back cover.)

Introduction

This report summarizes information collected during the summer of 1989 through surveys conducted at four state parks, one national park, three state beaches and two county beaches in California Oregon and Washington. Over 3,380 on-site (intercept) interviews were completed from June, 1989 to March, 1989 at the sites. An additional 1,115 mail-back questionnaires have been completed.

Tabular summaries of the following information are contained in this report: 1) socio-demographic profiles of users; 2) type and extent of recreation activities engaged in; 3) types and amount of expenditures on recreation activities; 4) willingness-to-pay for park access; and 5) satisfaction ratings for various park attributes. Also included are detailed profiles of the ten sites from the NOAA Inventory of Public Recreation Areas and Facilities in Coastal Areas. This information is intended for recreation planners and managers and business marketing agents that require simple summary information on the uses and users of coastal recreation sites.

Future reports will provide estimates of activity and site specific user values currently being developed using travel cost demand models and contingent valuation techniques.

Survey Design

Survey Questionnaires. Data collection employed two survey questionnaires: 1) an intercept (completed using a face-to-face interview); and 2) a mailback. The intercept, or on-site questionnaire, obtains information on the users and uses of the site and other information necessary for recreational demand modeling. The mailback questionnaire is used in a follow-up survey to obtain detailed information on trip-related expenditures, willingness-to-pay for park access using contingent valuation questions, and user satisfaction ratings (on a 0 to 10 scale) for several park attributes. The mailback survey also provides information necessary for estimating the importance of parks to local and regional economies.

Site Selection. Sites were selected from the NOAA Inventory of Public Recreation Areas and Facilities in Coastal Areas based on several criteria: 1) they had to be adjacent to tidal or ocean waters; 2) the sites had to have at least 100,000 visitors annually; 3) they had to have camping facilities either on-site or

nearby to house interviewers; 4) the sites had to be geographically dispersed; and 5) the managing agencies had to agree to provide on-site logistical support for the interviewers. The two county beaches - Santa Monica and Cabrillo - Long Beach are not distinct sites as are the state and federal parks selected for this survey. The county beaches in Long Beach, CA and the area around Cabrillo pier in San Pedro Bay and a seven mile stretch of beach along Santa Monica Bay were chosen to represent the more urbanized beaches in California. Figure 1 shows the geographic dispersion of the ten PARVS coastal sites, while Table 1 lists the managing agencies for each site. Detailed profiles of the sites are included in Appendix A.

Number of Responses. Overall, 3,381 interviews were completed on-site (intercept survey) while 1,115 follow-up mailbacks were received, for an overall mailback response rate of about 33 percent (Table 1). Given historical mailback response rates from PARVS, each site was targeted for at least 300-350 on-site interviews to ensure at least 100 mailback responses. The 300-350 on-site interview target was achieved at all sites except Cabrillo - Long Beach, which had 194. Mailback response rates were higher than the average for other coastal PARVS sites reported in Volumes 1 and 2 of this series, but lower than the average response rates reported in Volumes 3 and 4.

Sampling. The number of interviews at each site were stratified across various access points and time of week (weekdays versus weekends) to give proper representation of the various recreation activities available at each site. The sampling frame was a vehicle, while the sampling unit was an individual. One person was randomly selected from each randomly selected vehicle. Only those age 16 and older were interviewed. Demographic information was collected on up to eight people traveling in the vehicle. The number of people in each vehicle that participated in each activity was also collected. The mailback survey was sent to the person that was interviewed unless someone else paid for their expenses. In these cases, the person that paid expenses was identified and that person received the mailback portion of the survey.

Profile of Visitors

Information on the users of marine recreational resources, such as where they come from, how far they travel to get there, their age distribution, gender

and racial composition, education levels, family incomes, group type and size are all important for assessing current and future demands for park services. These data are also used in economic impact studies to estimate the demand for other goods and services from local areas surrounding the parks.

Market Area. Home zipcode, state, and county data was obtained from each person interviewed on-site. This information has been aggregated into Bureau of the Census "census divisions" to show the market areas for each of the sites (Table 2). Each of the census divisions is made up of a group of states and can be further aggregated into four census regions (Figure 2).

All of the ten sites draw the majority of the visitors from within the census division in which the site is located. All sites except Santa Monica Beaches and Leo Carrillo State Beach have at least two percent of their visitors coming from foreign countries. Foreign visitation ranges from 1.0 percent at Leo Carrillo State Beach to 20.1 percent at Deception Pass State Park. Notable is the distribution of visitors at Olympic National Park. As with other national parks and seashores in coastal areas, Olympic National Park has a more national and international market.

For assessing local and regional economic impacts, in terms of sales, employment, income, tax revenues, and the cost of local services, it sometimes is important to know more detail about travel patterns than Table 2 provides. Table 3 shows the in-state and out-of-state distribution of visitors for each of the ten sites. All of the sites, except Harris Beach State Park, Jesse M. Honeyman Memorial State Park and Ft. Stevens State Park (all Oregon sites), draw most of their visitors from inside the states where they are located. The Oregon sites are important to the state's economy because they stimulate an influx of expenditures from non-residents.

Distances Traveled to the Sites. For modeling recreational demand, it is important to know how far visitors travel to the sites. From this information, a proxy for the willingness-to-pay, or price, of site access is constructed. This is generally referred to as the "travel cost method." See Bockstael et al. (1986) for a review of this popular method for modeling recreation demand.

One of the many issues debated in travel cost modeling is the proper specification of distance traveled.

For single purpose, single-destination trips, total distance to the site, or total round trip mileage is appropriate. However, when multiple purpose or multiple destination trips are involved, total distance traveled to the site may overstate the cost of access. Information was obtained in the PARVS interviews to determine the purpose of the trip and if there were destinations other than the park visited. Additional information was also obtained on the primary purpose and destination of the trip. If other destinations were involved, the destination previous to the park where the respondents were interviewed was obtained. From this information, two distance variables were constructed (Table 4).

The first measure is unadjusted and represents the distance from where the trip was started to the park.¹ On average, visitors traveled over 452 miles one-way to the sites. The second measure is adjusted for those that visited multiple sites and for whom the park where interviewed was not the primary destination of the trip. For individuals in this category, the distance from the site visited previously to the site where the interview took place was calculated. On average, for all ten sites, this yielded a one-way travel distance of only about 168 miles, or about 63 percent less than the unadjusted measure.

Age Distribution of All Visitors. Table 5 shows the age distribution of all visitors to the ten sites. The actual age of up to eight people traveling in each vehicle interviewed was obtained. Eight age groups were formed to correspond to those used by the Bureau of the Census. This allows for the comparison of age distributions across the relevant market areas (i.e., states where the sites are located). Differences between the age distributions in the general market area for each site and the age distributions of visitors of each site suggest that age may be an important factor in explaining park visitation.

Gender and Racial Composition of All Visitors. All sites, except Jesse M. Honeyman Memorial State Park had a larger proportion of male visitors than the general population (Table 6). This suggests that gender may be an important factor in explaining park visitation. Racial composition also appears to be a significant factor. The percentage of visitors that are white is significantly higher than the general population for all the sites except for the two Los Angeles County sites (Cabrillo - Long Beach and Santa Monica Beaches), which have a considerably higher percentage of Asian/Pacific Island and Hispanic visitors.

Education Levels of All Visitors. Education level may be an important factor in explaining park visitation, however, the manner in which the data is reported by the Bureau of the Census does not lend itself to direct comparison with defined market areas. It may be possible with further work on Bureau of the Census data tapes to compile comparable categories. Another important use of this information is in park planning, to the extent that park activities are education dependent. Guided tours of archaeological or historical sites or on nature trails where interpretive services are available are important examples. Table 7 summarizes the education levels of all visitors to the parks.

Family Income of Visitors. Many studies of recreational behavior have found income to be an important factor in explaining both recreational participation and avidity. Table 8 shows the distribution of family incomes of all visitors aggregated into six groups that correspond to those categories reported by the Bureau of the Census. The survey actually collects income using 12 income categories. The family incomes of park visitors at all ten sites are significantly higher than the U.S. population as a whole. This lends further support for the hypothesis that income is an important determinant of park visitation.

Group Size and Type. The average group size across all sites consisted of about four people, with a high of 5.56 at Leo Carrillo State Beach and a low of 3.25 at Olympic National Park (Table 9). In addition, over 40 percent of all groups were of two or less people. Over 70 percent of all groups were family based (Table 10). These findings are significant. Schomaker and Morck (1986), in a study of group composition in advertisements for recreationally related products and services, found that family groups and groups larger than two persons were underrepresented when compared to the results of the National Recreation Survey (1977). Family groups appeared in only five percent of the ads, with an average group size of only 2.2.

Group type may also be important to park managers in addressing the issue of imposing site fees. McCurdy (1970, 1985) found that family groups, as opposed to single individuals, couples, or groups of friends most readily accepted site fees. Referendumtype contingent valuation questions on site fees, which will be discussed below, are asked as part of the PARVS survey. Thus, the capability exists to further test this proposition.

Type and Extent of Activities

Recreational Usage. In recreational demand modeling, the two most important pieces of information are a proxy for price and a measure of quantity demanded. Recreational usage information can provide information necessary to obtain both these measures. For example, in many studies the number of trips to the site represent the quantity demanded, while on-site time is used as an input in calculating a portion of the cost of the trip (e.g., total on-site plus travel time multiplied by the value of time). Both the proxy for prices and the measure of quantity demanded have varied across studies depending on the purpose and scope of the analyses. Table 11 reports the average number of days spent on-site during the past 12 months, the average number of trips to the site over the past 12 months, the average length of stay per trip (e.g., the number of days spent on-site during the trip on which the interview was conducted), and the percentage of single day trips. For all ten sites, the average person made 7.16 trips to the site where interviewed, and spent an average of 7.28 days there over the past 12 months. The average length of stay for the interview trip was 2.43 days, while 47.1 percent were single day trips.

There was a good deal of variation in these measures across sites. On average, the visitors to Santa Monica Beaches made the most trips (30.46) and spent the most days on-site (16.48) during the past 12 months, while visitors to Olympic National Park made both the fewest trips (1.31) and spent the fewest days on-site over the past 12 months (2.84). The average length of stay on the interview trip was less than three days across all ten sites with the highest at Harris Beach State Park (3.64 days) and the lowest at Cabrillo - Long Beach (1.19 days). Over 80 percent of the visits to Cabrillo - Long Beach and Santa Monica Beaches are single day visits.

Main Activities. Table 12a reports the ranking of the top ten "main" activities across all ten sites and how each of these activities are ranked for each of the sites. The top ten activities are not ranked on the basis of the greatest number of participants in each activity, but by the percent of visitors, age 16 and older, that responded that a particular activity was their main activity. The greatest percent of visitors said that Developed Camping was their main activity. However, none at Cabrillo - Long Beach said that Developed Camping was their main activity and overall, 11.2 percent of the sample said they had no main activity. At Jesse M. Honeyman Memorial State

Park 83.7 percent said they had no main activity. This suggests that modeling park demand on an activity basis using a travel cost model may not be advisable. The reason being that activity specific travel cost models employ the assumption that one activity provided the main motivation for the trip. This is clearly not true for a large proportion of this sample.

Activities of All Visitors. Table 12b reports the ranking of the top 15 activities. Activities are ranked on the basis of the greatest percent of participants from the sample of visitors of all ages. From 3,381 interviews of people 16 and older, there were 10,148 people of all ages for which activity participation was reported. Developed Camping remains the number one activity across all sites when based on total participation. Picnicking rose to number two overall. Sight-seeing and Sunbathing remained at numbers four and five respectively.

Participation rate, by activity, varied greatly across sites. Developed Camping, ranked number one overall, was only ranked number one at four out of the ten individual sites and as low as 22nd at Olympic National Park. Sunbathing ranked number one at Santa Monica Beaches, while Sight-seeing ranked number one at Olympic National Park, with 87.4 percent of the visitors participating in the activity.

Spending by Visitor

Studies in the economics of outdoor recreation have utilized expenditures for two purposes: 1) for specifying a proxy for price when modeling the demand for recreation; and 2) for economic impact analysis where the impact of recreational activity is estimated on local and/or regional economies in terms of sales, employment, income, tax revenues, etc. It is primarily to the former purpose that NOAA intends to apply the PARVS data.

Onsite Fees. Column one of Table 13 reports the average daily on-site fees paid per person. This information was obtained from the intercept portion of the survey. On-site fees represent a portion of the total cost of accessing a site and will be used with travel costs in constructing a proxy for price in future demand modeling work. The average expenditure varied greatly across the ten sites with a high of \$12.29 per person per day at San Onofre State Beach and a low of \$0.54 per person per day at Olympic National Park.

Trip Expenditures. Table 13 also reports all trip related expenditures. These expenditures include: 1) the amount spent while preparing for the trip at home, or upon return from the trip (e.g., film purchased at home in preparation for the trip and film development upon return from the trip); 2) while traveling to and from the site (e.g., expenses for lodging, food and travel); and 3) while visiting the site or immediate area (e.g., expenses for food, lodging, local travel, on-site fees, fishing bait, souvenirs, etc.). This comprehensive expenditure profile is particularly useful for analyzing the economic impact that visitors to parks have on local and/or regional economies.²

On average, total trip expenditures ranged from a high of \$840 per person at Coral Reef State Park to a low of \$238 per person at Honeymoon Island SRA.

There are several possible problems with the trip expenditures reported in Table 13. First, they are unweighted for sample response bias. Second, about 53 percent of the sample were on multiple destination trips. It is not clear whether all the expenditures made, while preparing for the trip or upon return home from the trip and while traveling to and from the site, should be considered as attributable to the site where interviewed. Future assessments of economic impact will have to address these problems.

Willingness-to-Pay

The survey used several direct approaches for measuring the willingness-of-visitors to pay site access fees. Each of these approaches utilize the contingent valuation method (CVM). Four separate questions were asked, one on the intercept questionnaire and three in the mailback survey. The question asked on the intercept survey was repeated on the mailback questionnaire.3 Two of the questions on the mailback survey were open-ended in that the maximum dollar amount the individual would pay was asked and that individual simply fills in a dollar amount. This represents the more traditional CVM approach. One question was asked on-site (repeated on mailback, see footnote 3) and one on the mailback survey using a relatively new approach which asks for "yes" or "no" responses to randomly assigned dollar amounts. This is commonly known as the referendum approach, since each person is simply asked to vote "yes" or "no" to the assigned dollar amount. This approach is thought to have several advantages over the open-ended question approach.

For example, the referendum approach avoids strategic bias⁴, and is similar to market transactions where consumers either purchase or do not purchase a product at the given market prices. The main disadvantages of this new approach is that it requires more sophisticated analyses in order to yield answers comparable to the open-ended questions and the methods of analysis are still experimental.

Open Ended Questions. Table 14 reports the results of two open-ended CVM questions on the willingness-to-pay site access fees. The first question asked what was the maximum amount the individual would be willing to pay for an annual vehicle pass that would permit access to the site for all persons in the vehicle. The pass would apply to the <u>interview site only</u> and would only cover site admission, not any other fees (i.e., camping). The average for all sites was \$9.50 and ranged from a high of \$17.75 at Honeymoon Island SRA, to a low of \$5.74 at Coral Reef State Park.

The second open-ended question again asked for the maximum amount the individual would be willing to pay for an annual vehicle pass, but the pass would allow admission to all sites the agency manages. It was expected that the willingness-to-pay for this type of pass would be higher than the pass that allows access to only one site, since it is expected that the option to visit additional sites may have some value. Although the means are lower at all sites for the one site pass, the differences are statistically insignificant only at Hugh Taylor Birch SRA and Honeymoon Island SRA.

The results presented here are only preliminary since several issues in analyzing the data are as yet unresolved. The estimates in Table 14 are unweighted for mailback response bias and neither an analysis of protest bids (i.e., zero bids given because they do not like the idea of fees) nor an analysis of anchoring bias (caused by placing the referendum question before the open-ended question) have been conducted. In the latter case, the true maximum amount may not have been given because the individual may be biasing their bid toward the randomly assigned dollar amount asked in the referendum question. These issues are currently being researched.

Referendum Questions. Table 15 presents the percentage of yes votes for each of the ten randomly assigned per-person per-day charges for site admission that was asked on the intercept questionnaire. As expected, the percent of yes votes generally

decline at higher dollar amounts. There are several inconsistencies where a higher percent of "yes" responses occur at higher dollar amounts. When aggregated across all ten sites these inconsistencies disappear, suggesting relatively large sample sizes may be required to achieve consistent results with this method. An overwhelming majority would be willing to pay at least \$2.00 per person per day at all sites except Coral Reef State Park and Honeymoon Island SRA.

Another referendum question was asked on the mailback portion of the survey. This question asks for the willingness-to-pay for an annual vehicle pass to the site where interviewed. This pass would admit everyone in the vehicle. Again, as expected, the percent of yes votes declines with increased dollar amounts with few exceptions (Table 16).

Satisfaction Ratings

The final section of the mailback survey asks visitors to rate their satisfaction with the site for six attributes on a scale from 0 to 10. The six attributes are: 1) the recreation experience at the site (Table 17); 2) the number of other visitors at the site (Table 18); 3) cleanliness of facilities (Table 19); 4) parking (Table 20); 5) water quality (Table 21); and 6) overall condition of the site (Table 22).

Recreation Experience. The mean ratings ranged from a low of 6.48 at Cabrillo - Long Beach to a high of 8.18 at Harris Beach State Park. At least 61 percent of the visitors to all ten sites gave a rating of eight or above.

Number of Visitors. This attribute is intended as an indicator of individuals perception of crowding conditions on their satisfaction. This attribute received the lowest rating across all sites. The mean scores ranged from 4.85 at Cabrillo - Long Beach to 6.12 at Santa Monica Beaches.

Cleanliness of Facilities. This attribute generally received high ratings across all sites. The lowest rating was at Cabrillo - Long Beach (4.33). Harris Beach State Park had the highest rating (8.86), with over 65 percent giving a rating of 9 or above.

Parking. Most visitors were generally pleased with the parking situation at the sites. This would seem to conflict with the ratings given on the number of other visitors. Jesse M. Honeyman Memorial State park had the highest rating (8.53), with over 58 percent giving a rating of 9 or above.

Water Quality. Average water quality ratings varied from a low of 3.85 at Cabrillo - Long Beach to a high of 8.39 at Jesse M. Honeyman Memorial State Park. Overall, 60 percent of the visitors gave a rating of 9 or above.

Overall Conditions of the Site. This attribute received the overall highest rating. The average ratings ranged from a low of 5.56 at Cabrillo - Long Beach to a high of 8.59 at Harris Beach State Park. Over 63 percent at Harris Beach State Park gave a rating of 9 or above.

On-Going and Future Activities

Data Collection. In the summer of 1990, 10 to 12 local-urban sites will be surveyed throughout the U.S. At the completion of the 1990 season, the coastal portion of PARVS will include information on over 50 sites and contain survey data on over 19,000 visitors to coastal recreation sites across the nation.

Consideration is being given to whether PARVS could be extended to include other types of sites such as wildlife refuges, hunting/game management areas and nature preserves. This would provide the capability to develop a more comprehensive set of activity and site specific user day values for coastal recreation.

Estimation of User Day Values. Researchers at SAB and North Carolina State University are currently developing travel cost demand models and contingent valuation methods using the data summarized in this report. These methods will be assessed for their ability to produce consistent and credible estimates of activity and site specific user day values.

Once accepted, these methods will be applied to the data collected at the remaining forty sites around the Nation. The result will be a National set of user day values developed with a consistent set of data and methodologies.

Site Valuation. For many policy and management decisions, it is important to know the total annual value generated by a site. Here user day values must be aggregated. Estimates of total site use by activity are required. Updates of total annual site visitation are being compiled for all sites surveyed (See Appendix A for site visitation for 1984, 1982, 1977 and 1972 from NOAA Inventory of Recreation Areas and

Facilities) in cooperation with the state and federal agencies managing the site.

Changes in Site Qualities. Total loss of a site is more rare than small, sometimes continuous changes in site qualities. Degradation of the site by water and air pollution and debris washed-up on shorelines result in losses in site value due to losses in user day values and lower visitation rates. Future research efforts will attempt to model (in a broad regional or National context) the losses in site values due to reductions in site qualities. The major focus will be on water quality.

Total Value of Coastal Recreation. A much more ambitious goal of the SAB program is to place a total annual value on all coastal recreation sites. To accomplish this, estimates of total coastal recreational use are required. Very little information currently exists.

To remedy this, SAB will be working with the U.S.D.A. Forest Service and the National Park Service in modifying the 1991 National Recreation Survey to obtain total use estimates for coastal recreation. Although sample sizes will be too small to provide more than broad regional estimates of use, the study combined with PARVS data and analysis will provide the capability to provide regional and National estimates of the total value of coastal recreation.

Footnotes

- 1. The respondent was asked how many miles they traveled from where they started their trip to the site. As an alternative we used the highway mileage calculated using a micro-computer based software program called "Hiways and Byways" by New Direction Software, Inc. A comparison of the mileages provided by the respondent and that calculated from the computer program revealed that the absolute value of the differences increased with the total distance traveled. Many include mileage associated with the side trips. The mileage reported in Table 4 is from the Hiways and Byways computer program.
- 2. The U.S. Forest Service has developed an analytic capability for assessing economic impacts called "Implan". Implan provides planning analysts with the capability to construct a local and/or regional input-output models for any applicable area and to perform evaluations of potential economic effects of alternative courses of action. See Cordell et al. (1987) for an example.

- 3. The on-site referendum question was repeated on the mailback because recent evidence from research being conducted at the University of Colorado, at Boulder, suggests that people may change their bids after they have had more time to think about the decision. The results of this repeat of the question are not reported here. Future analysis of this data will test for this effect.
- 4. The overstatement of willingness-to-pay when it is perceived that the fee will not be charged but will lead to park protection or improvement, or understatement if it is perceived management is planning to impose fees but the individual is reasonably sure the park will be protected. See Desvouges et al. (1983) for a discussion of biases.

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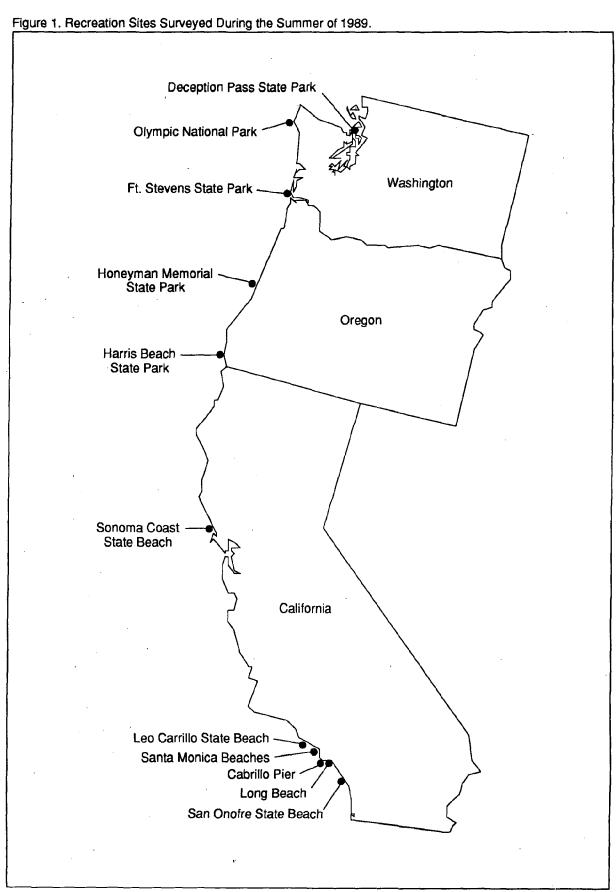
List of Figures and Tables*

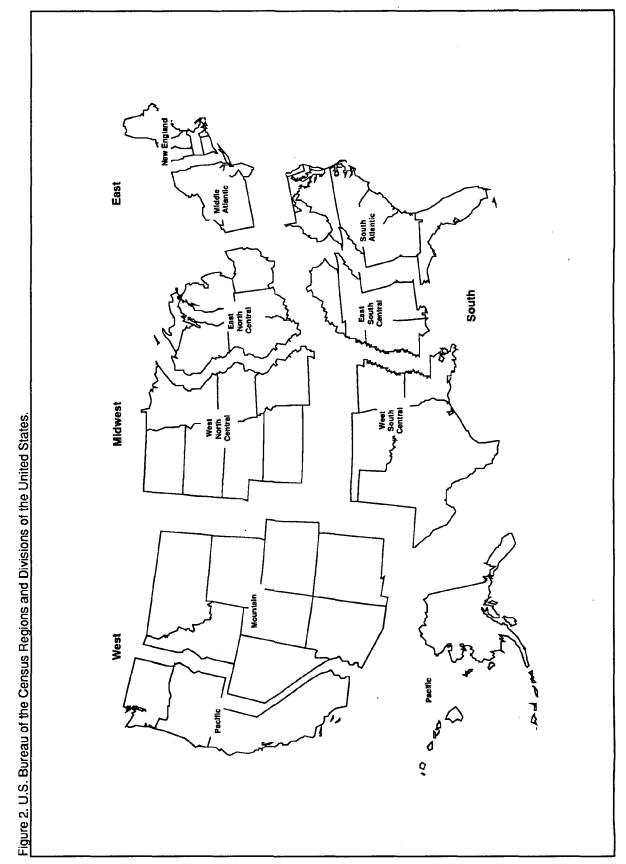
Figures

- 1. Recreation Sites Surveyed During the Winter-Spring 1989.
- 2. U.S. Bureau of the Census Regions and Divisions of the United States.

Tables

- 1. Managing Agencies and Number of Completed Interviews for the 1989 PARVS Coastal Sites.
- 2. Distribution of Visitors by Census Division or Country of Residence.
- 3. Distribution of In-State and Out-of-State Visitors, by Site.
- 4. Average Distance Traveled to the Six Coastal Sites.
- 5. Age Distribution of All Visitors by Site, Compared to the States and the U.S.A.
- 6. Gender and Racial Composition of All Visitors by Site, Compared to the States and the U.S.A.
- 7. Distribution of All Visitors by Highest Education Level Attained, by Site.
- 8. Distribution of Family Income of Visitors by Site, Compared to the States and the U.S.A.
- 9. Distribution of Visitors by Group Size.
- 10. Distribution of Visitors by Group Type.
- 11. Average Annual Number of Days on Site and Trips to the Site, and the Average Length of Stay on Site for the Interview Trip.
- 12. a) Ranking of the Top Ten Main Activities of Visitors Age 16 and Older.
 - b) Ranking of the Top 15 Activities of Visitors of All Ages.
- 13. Average Daily On-site Fees and Trip Expenditures Per Person.
- 14. Maximum Willingness-to-Pay for an Annual Vehicle Pass for the Interview Site Versus Any Site the Agency Manages.
- 15. Willingness-to-Pay Randomly Assigned Dollar Amounts, On-site Survey.
- 16. Willingness-to-Pay for Annual Vehicle Pass to Site: Randomly Assigned Dollar Amounts Mailback Survey.
- 17. Satisfaction Ratings for Recreation Experience at the Site.
- 18. Satisfaction Ratings-Number of Other Visitors at the Site.
- 19. Satisfaction Ratings on Cleanliness of Facilities.
- 20. Satisfaction Ratings on Parking.
- 21. Satisfaction Ratings on Water Quality.
- 22. Satisfaction Ratings on Overall Condition of the Site.





ਨ Table 1. Managing Agencies and Number of Completed Interviews for the 1989 PARVS Coastal Sites.

		Number of	Number of Interviews
State/Site	Managing Agency	On-site	Mailback
California San Onofre State Beach	CA, The Resources Agency, Dept. of Parks and Recreation	335	94
Cabrillo - Long Beach	Los Angeles County, Parks and Recreation	194	35
Santa Monica Beaches	± ,	322	73
Leo Carrillo State Beach	CA, The Resources Agency, Dept. of Parks and Recreation	313	09
Sonoma Coast State Beach	=	374	174
Oregon Harris Beach State Park	OR, Dept. of Transportation State Parks and Recreation Division	368	131
Jesse M. Honeyman Memorial State Park	E .	356	129
Ft. Stevens State Park	•	360	170
Washington Olympic National Park	National Park Service	362	148
Deception Pass State Park	WA, State Parks and Recreation Division	397	100
All Sites		3,381	1,114

Table 2. Distribution of Visitors by Census Division or Country of Residence.*

			:		U)	Sites (Percent)	(
Census Division - Country	All	San Onofre	Cabrillo/ Long Beach	Santa Monica	Leo Carrillo	Sonoma Coast	Harris Beach	Honeyman	Ft. Stevens	Olympic	Deception
New England	0.5	0.5	0.0	0.0	1.0	0.5	9.0	0.3	0.3	1.7	0.3
Middle Atlantic	6.0	0.3	1.0	1.6	1.0	0.0	0.5	9.0	0.3	4.1	0.0
South Atlantic	2.0	2.1	1.0	3.1	1.0	0.5	1.4	2.2	1.9	5.0	1,0
East North Central	1.6	0.3	1.0	1.7	9.0	0.5	1.1	2.8	1.7	9.9	0.0
East South Central	0.3	0.0	0.0	0.3	9.0	0.0	0.0	0.3	0.0	1.	0.0
West North Central	1.0	0.3	0.0	1.2	9.0	0.0	1:1	1.4	7	3.0	1.0
West South Central	0.7	0.3	0.0	1.2	0.3	0.5	1.1	0.0	0.3	2.8	0.0
Mountain	4.0	6.0	2.6	1.9	1.6	2.2	5.7	4.8	7.2	5.5	1.5
Pacific	81.4	85.7	90.7	97.8	92.3	93.3	80.4	73.9	79.2	62.2	76.1
Canada	5.7	1.2	1.5	0.2	0.3	T	5.7	11.5	5.6	6.1	18.9
All Other Foreign	1.9	3.3	2.2	1.2	0.7	1.4	2.2	2.2	2.5	1.9	1.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* Toned areas show Census Division within which the site is located.

Table 3. Distribution of In-State and Out-of-State Visitors, By Site.

	Visitor	rs (Percent)
State/Site	In-State	Out-of State
California		
San Onofre State Beach	84.8	15.2
Cabrillo - Long Beach	90.2	9.8
Santa Monica Beaches	85.7	14.3
Leo Carrillo State Beach	91.7	8.3
Sonoma Coast State Beach	92.2	7.8
Oregon		,
Harris Beach State Park	44.8	55.2
Jesse M. Honeyman Memorial State Park	46.1	53.9
Ft. Stevens State Park	44.4	55.6
Washington		
Olympic National Park	53.9	46.1
Deception Pass State Park	73.6	26.4

Table 4. Average Distance Traveled to the Ten Coastal Sites.

	Average N	Average Miles to Site
State/Site	From Where Started Trip ¹	From Site Previously Visited ²
California San Onofre State Beach	362	151
Cabrillo - Long Beach Santa Monica Beaches	293 260	118
Leo Carrillo State Beach Sonoma Coast State Beach	. 243 223	156 156
Oregon Harris Beach State Park Jesse M. Honeyman Memorial State Park Ft. Stevens State Park	571 663 490	329 188 168
Washington Olympic National Park Deception Pass State Park	1050 264	207 119
All Sites	452	168

'Most people (97%) started the trip from their home, so for the majority, this represents the distance from their home to the site.

²About 38 percent of the sample were on trips where they visited multiple sites. Of these, about 81 percent (i.e., 31 percent of the entire sample) did not designate the site (where they were interviewed) as their primary destination. For those that visited other sites and the site of interview was not the primary destination, the distance from the site visited previously to the site of the interview was calculated.

த் Table 5. Age Distribution of All Visitors by Site, Compared to the States and the U.S.A.

				Age Group (Percent)	(Percent)			
State/Site/Census Division	<15	15-19	20-24	25-34	35-44	45-54	55-64	65>
California	55	ග	10	18	12	5	o	-
San Onofre State Beach	56	14	Ŧ	17	<u>π</u>	2 1-	> <	<u> </u>
Cabrillo - Long Beach	36	4	္မွ	50	5 5	- σ	ן ע	ο α
Santa Monica Beaches	15	=	6	83	<u> </u>		nσ	۸ د
Leo Carrillo State Beach	23	13	4	52	<u> </u>	ָ נגי	· -	٠, ٣-
Sonoma Coast State Beach	30	4	ဗ	17	8	9	. თ	۷.
Oregon	22	თ	6	8	12	σ	σ	5
Harris Beach State Park	53	9	4	4	<u> 6</u>) [) [ir
Jesse M. Honeyman Memorial State Park	36	c)	4	. 27	<u>6</u>		<u>4</u>	- 4
Ft. Stevens State Park	ဗ္ဗ	9	က	5	23	တ	ဖ	ဖ
Washington	52	თ	10	18	12	ത	o	-
Olympic National Park	24	4	ဖ	15	21	- 1	10	· 6
Deception Pass State Park	32	9	22	50	61	ω	ю	4
All Sites	53	7	9	19	18	თ	2	5
Mountain	52	თ	10	18	1	თ	Ø	10
Pacific	52	თ	10	18	5	10	6	10
U.S.A.	55	∞ ,	თ	17	13	10	6	12

Table 6. Gender and Racial Composition of Visitors by Site, Compared to the States and the U. S. A.

			Gend	ler/Racial Con	Gender/Racial Composition (Percent)	()	
State/Site	Males	Native American	Asian/ Pacific Island	Black	Hispanic	White	Other
California	49.30	-	5	∞	80	17	-
San Onofre State Beach	57.40	⊽	ત	-	- ∞	87	-
Cabrillo - Long Beach	51.00	-	4	6	20	92	-
Santa Monica Beaches	56.80	⊽	9	S	တ	6/	7
Leo Carrillo State Beach	50.80	∵	2	84 ;	4	91	7
Sonoma Coast State Beach	47.20	-	-	-	ស	91	⊽
Oregon	49.25	-	8	-	-	95	⊽
Harris Beach State Park	49.30	0	⊽	-	0	66	
Jesse M. Honeyman						•	•
Memorial State Park	48.10	7	⊽	7	8	97	7
Ft. Stevens State Park	50.40	⊽	81	∵	7	26	0
Washington	49.68	2	ო	8	-	92	7
Olympic National Park	49.70	-	8	7	⊽	96	0
Deception Pass State Park	52.90	⊽	01	α	7	92	⊽
All Sites	50.95	7	61	-	4	95	⊽
Pacific	49.45		7	9	9	6/	-
Mountain	49.68	က	•	8	S	88	-
U.S.A.	48.60	1	5	12	α	83	. ▽

□ Table 7. Distribution of Visitors by Highest Education Level Attained, by Site.

		Edi	Education Levels (Percent completed)	nt completed)		
State/Site	8th Grade or Less	9th-11th Grade	High School Graduate	13-15 Years	College Graduate	Graduate Education
California						
San Onofre State Beach	24	=	21	25	£.	ď
Cabrillo - Long Beach	36	7	21	16	7	. (c
Santa Monica Beaches	15	80	27	23	. 2	o
Leo Carrillo State Beach	21	9	17	2	20	, -
Sonoma Coast State Beach	24	9	22	21	18	: တဲ
Oregon						
Harris Beach State Park	22	æ	31	12	15	12
Jesse M. Honeyman Memorial State Park	33	80	21	4	15	i o
Ft. Stevens State Park	31	8	23	18	12	ω (
Washington						
Ciympic National Park	ည	ဖ	24	20	14	17
Deception Pass State Park	35	7	22	17	12	7
All Sites	56	&	23	18	15	10

Table 8. Distribution of Family Income of Visitors by Site, Compared to the States and the U.S.A.

		ш.	Family Income Before Taxes (Percent)	efore Taxes (Per	rcent)	
State/Site	Less Than \$10,000	\$10,000- 19,999	\$20,000- 29,999	\$30,000- 39,999	\$40,000- 49,999	\$50,000 and over
California San Cadro State Booch	₩.	27	25	15	7	8 27
Sail Offore State Beach Cabrillo - Long Beach	ა ნ	17	26 26	<u>+</u> +	5 2	27
Santa Monica Beaches	9	12	17	19	7	35
Leo Carrillo State Beach	7	ω	15	14	17	44
Sonoma Coast State Beach	7	ω	15	22	23	30
Oregon	19	31	27	13	5	2
Harris Beach State Park	4	9	15	31	22	22
Jesse M. Honeyman Memorial State Park	4	5	21	21	50	21
Ft. Stevens State Park	8	12	19	25	19	23
Washington	17	27	28	16	9	9
Olympic National Park	က	တ	50	22	17	53
Deception Pass State Park	4	16	18	23	16	23
All Sites	က	10	18	21	19	53
Mountain	20	31	56	13	5	ហ
Pacific	18	27	25	15	7	ω
U.S.A	53	59	22	=	4	ľ

S Table 9. Distribution of Visitors by Group Size.

			Group Siz	Group Size (Percent of total)	
State/Site	Average Group Size	One	Two	Three-Four	Five and Up
California					
San Onofre State Beach	3.32	6.6	38.2	35.5	19.7
Cabrillo - Long Beach	3.67	30.5	22.5	25.1	219
Santa Monica Beaches	3.29	36.3	24.9	24.2	14.6
Leo Carrillo State Beach	5.56	9.5	30.7	25.8	34.0
Sonoma Coast State Beach	4.08	1.6	36.9	30.2	31.3
Oregon					
Harris Beach State Park	4.25	4.7	36.1	32.1	27.1
Jesse M. Honeyman Memorial State Park	4.34	2.0	29.7	41.2	27.1
Ft. Stevens State Park	3.66	5.0	34.2	41.4	19.4
Washington					
Olympic National Park	3.25	3.9	48.6	32.3	15.2
Deception Pass State Park	4.09	12.3	29.5	31.5	26.7
All Sites	3.95	10.0	33.8	32.4	23.8

Table 10. Distribution of Visitors by Group Type.

			Gro	Group Type (Percent)	ent)		
State/Site	Family	More than One Family	Friends and Family	Friends	Organized Group	One Person	Other
California							
San Onofre State Beach	55.3	1.4	14.8	21.7	1.0	5.8	0.0
Cabrillo - Long Beach	41.4	1.0	8.9	12.0		37.7	0.0
Santa Monica Beaches	38.2	0.0	3.5	7.2	0.3	50.8	0.0
Leo Carrillo State Beach	39.5	0.0	12.0	31.7	6.1	14.9	0.0
Sonoma Coast State Beach	81.6	6.0	8.2	5.8	0.0	2.9	9.0
Oregon							
Harris Beach State Park	82.7	T:	3.0	5.5	0.8	6.1	0.8
Jesse M. Honeyman Memorial State Park	65.1	17.1	10.2	4.8	9.0	2.0	0.0
Ft. Stevens State Park	6.92	9.0	8.1	7.2	9.0	5.8	9.0
Washington Okasi Metional Body	5		Ċ	•	•	(. (
CIVILIDIC INGLICIAL PARK	47.7	C.O	20 N		0.3	3.0	0.0
Deception Pass State Park	60.5	10.7	8.4	9.9	1.0	12.8	0.0
All Sites	64.3	3.6	7.6	10.7	9.0	12.8	0.2

R Table 11. Average Annual Number of Days on Site and Trips to the Site, and the Average Length of Stay on Site for the Interview Trip.

	An	Annual	Interv	Interview Trip
State/Site	Days	Trips	Days	% Single Day Trips
California	1			
San Onofre State Beach	5.67	3.42	3.35	16.1
Cabrillo - Long Beach	15.98	24.62	1.19	96.4
Santa Monica Beaches	16.48	30.46	1.78	81.2
Leo Carrillo State Beach	8.96	8.10	1.96	71.1
Sonoma Coast State Beach	6.11	2.81	2.84	21.9
Oregon				
Harris Beach State Park	4.96	1.70	3.64	22.3
Jesse M. Honeyman Memorial State Park	3.63	2.35	2.03	45.4
Ft. Stevens State Park	4.79	2.69	2.40	42.5
Washington				
Olympic National Park	2.84	1.31	2.18	47.0
Deception Pass State Park	6.93	11.42	2.22	55.7
All Sites	7.28	7.16	2.43	47.1

Table 12a. Ranking of the Top Ten Main Activities of Visitors Age 16 and Older.*

								Sites	Sites (Rank and Percent)	and P	ercent)										
Activities	Sit	All Sites Rank %	San Onofre Rank %		Cabrillo/ Long Beach Rank %		Santa Monica Rank %	Leo Carrillo Rank %	% 0 0	Sonoma Coast Rank %	ma Ist %	Harris Beach Rank %		Honeyman Rank %		Ft. Stevens Rank %	% sues	Olympic Rank %		Deception Rank %	٥. ا
Developed Camping	1	32.8	2 29.4	9.4	0.0	-	19.0	7	4.2	-	77.2	<u>ب</u> بې	55.1	2	9.7	-	68.7	6 +	_	-	46.8
No Main Activity	2 11.2	11.2	•	0.0	. 0.0	•	0.0	10	1.6	•	0.0	4	11.6	–	83.7	S	2.5	3 5.8	80	=	0.3
Relaxing	ო	8.1	د	32.4	3 18.0	S.	10.6	N	21.4	•	0.0		0.0	ro O	9.0	8	6.7	9 1.1	-	•	0.0
Sightseeing	4	6.1	ω	2.7	8 2.6	Ξ	1.9	15	0.3	ო	3.2	ις ,	3.0	,	0.0	4	3.1	1 37.3	ь:	2	4.0
Sunbathing	2	5.1	9	3.3	2 18.0		2 15.3	ო	17.4	ß	1 .3	ဖ	0.3	,	0.0		0.0	- 0.0	0	4	5.0
Primitive Camping	9	4.3	6	2.4	. 0.0	4	0.0	15	0.3	ω	0.3		0.0	,	0.0		0.0	2 35.9	6.	∞	1.0
Other Swimming	7	3.4	3	3.6	1 22.7	4	4 11.5	O	1.9	φ .	-:	9	0.3	ß	9.0	co	4.1	=	9.0	9	0.5
Saltwater Fishing	ω	3.4	5	0.3	4 11.3	80	3.4	15	0.3	4	1.9	2	15.2	ဖ	0.3	12	9.0	7	2.5	7	<u></u>
Picknicking/Family Gathering	တ	3.3	4	4.2	9.6	7	4.4	ιΩ	5.2	0	12.6	3	13.3	ი	5.0	9	7:	ω	4.4	ო	13.6
Surfing	10	10 2.7	3 15.9	5.9	13 1.0	9	6.5	9	4.5		0.0		0.0	,	0.0	13	0.3	12 (0.3		0.0

Table 12b. Ranking of the Top 15 Activities of Visitors of All Ages

					Sites (Rar	Sites (Rank and Percent)	t)				
Activities	All Sites Rank %	San Onofre Rank %	Cabrillo/ Long Beach Rank %	Santa Monica Rank %	Leo Carrillo Rank %	Sonoma Coast Rank %	Harris Beach Rank %	Honeyman Rank %	Ft. Stevens Rank %	Olympic Rank %	Deception Rank %
Developed Camping	1 59.1	1 82.0	8 7.7	3 27.6	8 35.1	1 83.2	1 79.9	2 75.2	1 84.2	22 9.9	2 57.4
Picknicking	2 58.0	12 13.2	3 37.9	4 25.9	2 63.7	2 77.2	2 76.3	4 62.0	6 50.8	6 50.1	1 59.4
Walking for Pleasure	3 56.6	7 32.4	5 11.9	6 15.1	3 56.2	3 76.9	3 67.5	1 80.1	4 52.9	2 75.2	3 51.8
Sightseeing	4 55.2	6 33.2	6 10.4	7 14.6	6 44.0	4 76.8	5 56.1	3 74.7	2 67.2	1 87.4	4 42.2
Sunbathing	5 47.1	2 77.0	2 50.8	1 50.2	1 84.5	6 46.6	4 61.8	9.66	15 17.0	15 22.7	5 34.4
Other Outdoor Swimming	6 34.2	5 37.2	1 51.8	2 41.9	4 54.6	17 10.6	6 49.5	7 38.7	10 23.1	16 16.8	7 32.3
Driving for Pleasure	7 33.9	15 11.7	11 3.5	16 2.4	11 26.7	5 56.1	7 43.8	5 53.3	7 36.2	7 48.8	9 21.6
Day Hiking	8 28.0	8 31.6	16 1.5	20 1.2	10 30.0	7 46.2	15 12.0	13 19.0	8 29.7	5 53.0	6 34.3
Observing/ Photographing Wildlife	9 24.3	12 13.2	12 3.3	18 2.0	7 36.1	8 44.2	9 21.7	9 27.9	12 19.7	9 44.2	15 12.5
Attend Family Gathering	10 22.8	9 23.1	7 8.7	10 6.3	5 44.3	10 33.0	8 38.8	11 19.3	19 12.4	17 15.2	13 16.2
Doing Photography	11 20.1	13 13.0	16 1.5	13 3.6	13 20.1	11 32.1	14 13.1	8 33.6	14 17.4	11 35.1	14 14.5
Collecting Seashells Etc.	12 18.2	17 8.0	10 4.5	15 3.2	14 18.2	9 38.5	10 17.0	16 15.5	13 18.0	14 23.5	10 20.7
Other Nature Study	13 18.0	16 9.4	13 2.5	23 0.7	9 30.2	12 28.0	13 13.3	10 23.9	17 13.4	12 28.4	12 17.0
Visiting Museums	14 17.8	21 5.1	4 12.5	19 1.5	20 8.9	18 10.0	16 11.4	17 15.1	5 52.3	10 43.7	18 7.5
Reading Historical Markers	15 17.3	25 3.4	24 0.7	24 0.3	18 10.3	13 16.2	12 13.8	12 19.1	11 20.1	4 53.6	11 19.1
1											

Table 13. Average Daily On-site Fees and Trip Expenditures Per Person.

State/Site	On-site Fees (\$)	% Interviewed That Paid Fees	Average Trip Expenditures Per Person
California			
San Onofre State Beach	12.29	95.5	363.13
Cabrillo - Long Beach	1.67	44.3	298.54
Santa Monica Beaches	4.96	51.9	228.21
Leo Carrillo State Beach	5.73	48.6	434.18
Sonoma Coast State Beach	8.77	87.7	319.49
Oregon			•
Harris Beach State Park Jesse M. Honeyman	10.97	90.0	623.27
Memorial State Park	7.06	80.1	721.03
Ft. Stevens State Park	6.71	82.2	580.94
Washington			
Olympic National Park	0.54	12.4	765.80
Deception Pass State Park	7.55	49.4	235.61
All Sites	6.88	65.3	498.21

Table 14. Maximum Willingness- to-Pay For an Annual Vehicle Pass for the Interview Site Versus Any Site the Agency Manages.

		Interview Site*(\$)		Any	Any Site Agency Manages (\$)**	s (\$)**
State/Site	Mean	Std Error	z	Mean	Std Error	z
California						
San Onofre State Beach	14.08	2.58	78	24.00	4.31	79
Cabrillo - Long Beach	13.67	7.64	33	12.02	4.15	24
Santa Monica Beaches	7.89	2.14	99	17.59	4.31	29
Leo Carillo State Beach	15.51	2.82	53	28.90	5.47	52
Sonoma Coast State Beach	10.75	1.34	165	20.16	2.01	164
Oregon						
Harris Beach State Park	5.26	0.86	120	9.32	1.63	117
Jesse M. Honeyman						
Memorial State Park	3.36	0.79	120	9.20	1.56	115
Ft. Stevens State Park	4.58	0.86	159	13.24	3.45	152
Washington						
Olympic National Park	5.91	1.00	134	16.67	1.71	127
Deception Pass State Park	9.19	2.32	97	11.27	1.68	95
All Sites	7.91	0.54	1025	15.64	0.92	981
				•		

*Pass would admit all persons in the vehicle at the interview site only and is good for one year. **Pass would admit all persons in the vehicle to any site the agency manages and is good for one year.

Table 15. Willingness- to-Pay Randomely Assigned Dollar Amounts - On-site Survey.

	þ			Dollars F	er Person	Dollars Per Person Per Day(Percent Yes)*	Percent Ye	*(S*		•
State/Site	1.00	2.00	5.00	7.50	10.00	12.50	15.00	25.00	50.00	75.00
California San Onofre State Beach	74.3	70.0	42.9	37.5	15.2	7-0	18.2	89	0 0	0
Cabrillo - Long Beach	71.4	47.4	14.3	5.0	5.3	0.0	0.0	0.0	0.0	0.0
Santa Monica Beaches	დ. დ.	38.7	25.8	16.1	22.6	0.0	5.7	0.0	0.0	3.1
Sonoma Coast State Beach	7 C	25.5	~ c	85.55 57.50	, 6.7 4 0 7	3.5	0.0 0.0 0.0	3.2	0.0	0.0
Colloring Codel Clare Deach	K	.	200	5.4	<u>0</u>	9.7	3.2	ų Š	0.0	0.0
Oregon										
Harris Beach State Park	2'16	94.4	85.7	898	72.2	59.5	11.1	2.6	0.0	0.0
Memorial State Park	48.7	45.7	5.9	2.8	11.1	5.9	2.9	0.0	0.0	0.0
Ft. Stevens State Park	 	30.6	2.8	2.9	2.9	0.0	0.0	0.0	2.8	2.7
Washington Olympic National Park	833	77	59.8	37.8	r.	т. 4	7.0	c	c	c
Deception Pass State Park	0.08	62.5	30.8	22.5	7.7	2.5	2.6	0.0	0.0	0.0
All Sites	75.1	64.4	38.6	28.3	17.1	10.7	5.9	1.7	0.3	9.0

*Toned areas show dollar amounts for which a majority (i.e., 50% or more) of those interviewed responded that they would pay the fee.

🐹 Table 16. Willingness- to-Pay For Annual Vehicle Pass to Site: Randomly Assigned Dollar Amounts - Mailback Survey.

		Dollars Pe	Dollars Per Year Per Vehicle Pass (Percent Yes)*	ehicle Pass	(Percent Yo	*(se		
State/Site	1.00	5.00	10.00	15.00	25.00	50.00	100.00	Number of Responses
California San Onofre State Beach	73.3	24.6	41.7	45.5	25.0	11.1	0:0	62
Cabrillo - Long Beach		40.0	0.09	50.0	780	0.0	0.0	27
Santa Monica Beaches Leo Carillo State Beach	88.9 100.0	44.4 83.3	57.1	25.0 40.0	23.0 0.0	10.0 55.6	0.0	& ¥
Sonoma Coast State Beach	0.000	63.3	40.7	44.4	9.5	23.8	10.3	. 2
Oregon Harris Beach State Park	80.0	55.6	20.0	25.0	8.7	0.0	5. 9.	115
Jesse M. Honeyman Memorial State Park	727	22.2	17.7	28.6	0	. 0	7. G	118
Ft. Stevens State Park	38.1	42.9	14.3	8.7	23.8	0.0	0.0	148
Washington Olympic National Park	72.7	70.6	22.2	33.3	6.3	0.0	5.9	125
Deception Pass State Park	2 69	36.4	57.1	13.3	30.8	11.1	0.0	94
All Sites	71.6	50.4	36.3	28.1	15.5	9.8	4.0	986

*Toned areas show dollar amount for which a majority (i.e., 50% or more) of those interviewed responded that they would buy the pass.

Table 17. Satisfaction Ratings for Recreation Experience at the Site.

		Standard		1				Rating	Rating (Percent)	Ð				
State/Site	Mean	Error	z	0	+	5	ဇ	4	2	9	_	æ	6	10
California						i 								
San Onofre State Beach	6.54	.28	80	1.3	1.2	5.0	5.0	6.2	17.5	11.2	6.2	26.3	6.3	13.8
Cabrillo - Long Beach	6.48	.46	27	3.7	0.0	0.0	3.7	7.4	22.3	14.8	14.8	1.1	7.4	14.8
Santa Monica Beaches	7.62	8	63	0.0	9.1	0.0	9.	1.6	6.3	14.3	-	34.9	1:1	17.5
Leo Carrillo State Beach	7.89	8	23	0.0	9.	0.0	6 .	3.7	11.3	5.7	11.3	13.2	18.9	32.1
Sonoma Coast State Beach	7.36	.17	169	3.0	9.0	1.2	0.0	2.4	8.9	6.5	23.7	56.6	10.6	16.5
Oregon														
Harris Beach State Park Jesse M. Honeyman	8.18	19	119	1.7	0.0	0.8	8.0	1.7	5.0	3.4	13.5	23.5	16.0	33.6
Memorial State Park Ft. Stevens State Park	7.97 7.75	.16	119 151	0.0	0.0	0.8 2.0	0.0 0.0	0.8 2.6	10.1	7.6	11.8 12.6	26.1 19.2	16.8 15.9	25.2 26.5
Washington	1	!		,	!	,		•			1	1	;	,
Olympic National Park Deception Pass State Park	7.72	20	126 92	1.1	0.0	0.0	1.6 2.2		7.1 7.6	7.1 8.7	12.7 21.7	27.0 21.8	12.7	28.6 21.7

S Table 18. Satisfaction Ratings - Number of Other Visitors at the Site.

		Standard						Ratir	Rating (Percent)	£				
State/Site	Mean	Error	z	0	-	2	ဇ	4	က	ဖ	7	æ	6	10
California														
San Onofre State Beach	4.96	.34	77	6.5	6.5	10.4	10.4	13.0	15.5	3.9	7.8	14.3	13	10.4
Cabrillo - Long Beach	4.85	99.	56	11.5	3.9	7.7	11.5	11.6	15.4	7.7	7.7	1.5	0	1 5
Santa Monica Beaches	6.12	.35	27	3,5	0.0	5.3	7.0	12.3	14.0	15.8	8.8	80	10.5	14.0
Leo Carrillo State Beach	5.87	.40	23	6.	9.7	5.7	7.6	9.4	13.2	13.2	9.4	11.3	~	18.9
Sonoma Coast State Beach	5.69	.22	160	7.5	3.1	3.1	4.4	10.6	21.3	8.1	10.6	16.9	4.4	10.0
Oregon														
Harris Beach State Park	00.9	.29	112	8.6	3.6	2.7	2.7	6.2	17.0	0.8	10.7	17.9	7.1	14.3
Jesse M. Honeyman			-									<u>!</u> :) :
Memorial State Park	80.9	.28	116	7.7	4.3	3.4	3.4	7.8	13.8	8.6	14.7	10.4	6.5	16.4
Ft. Stevens State Park	5.69	.25	143	5.6	2.8	8.6	7.7	5.6	21.0	7.7	6.3	11.8	6.3	15.4
Washington		į	:	,	,		,							
Olympic National Park	90.9	97.	124	0.6	3.2	2.4	3.2	2.7	18.6	8. T.	17.7	12.1	6.5	14.5
Deception Pass State Park	5.66	.3 1	88	8. 9.	2.7	3.4	8.0	2.7	19.3	9.1	12.5	10.2	6.8	12.5

Table 19. Satisfaction Ratings on Cleanliness of Facilities.

		Standard			ļ	,	Ī	Rating	Rating (Percent)					
State/Site	Mean	Error	z	0	-	2	က	4	2	ဖ	7	ω	6	10
California														
San Onofre State Beach	5.99	13	8	4.9	4.9	2.5	6.2	7.4	17.3	12.4	1.1	13.6	3.7	16.0
Cabrillo - Long Beach	4.33	.42	27	3.7	0.0	18.6	22.2	7.4	18.5	14.8	3.7	7.4	3.7	0.0
Santa Monica Beaches	7.30	8	63	0.0	0.0	4.8	3.2	9.1	17.5	6.7	7.9	23.8	9.5	23.8
Leo Carrillo State Beach	7.08	34	53	0.0	1 .9	1 .9	7.5	3.8	15.1	5.6	15.1	13.2	15.1	20.8
Sonoma Coast State Beach	7.30	91.	169	1.2	4.	9.0	3.5	3.5	9.5	7.1	17.8	26.0	15.4	14.2
Oregon														
Harris Beach State Park Jesse M. Honeyman	8.86	.13	120	0.0	0.0	0.0	0.0	0.0	4.2	3.3	8.3	17.5	20.0	46.7
Memorial State Park	8.39	.16	120	0.0	9.0	9.0	6.0	0.0	5.0	1.7	15.0	21.7	20.8	33.3
Ft. Stevens State Park	7.57	.18	152	1,3	9.0	2.0	3.3	2.0	6.6	6.6	14.5	20.4	16.4	23.0
Washington Olympic National Park	7.84	ç	197	e o	c	ď	4	o C	7	0	0	300	т О	7 06
Deception Pass State Park	6.73	. 26 56	95	3	0.0	6.5	3.8 8.3	6.5	18.5	5.4	9.8	25.0	8.7	15.2

S Table 20. Satisfaction Ratings on Parking.

		Standard			,			Ratir	Rating (Percent)	£ £				
State/Site	Mean	Error	z	0	-	8	က	4	ro ·	ဖ	7	œ	6	10
California														
San Onofre State Beach	7.54	.25	81	0.0	0.0	1.2	3.7	5.0	14.8	7.4	6	18.5	66	9 66
Cabrillo - Long Beach	4.85	.59	27	11.1	11.2	0.0	14.8	3.7	14.8	7.4	14.8	14.8	0.0	7.4
Santa Monica Beaches	6.38	36	63	3.2	3.2	6.3	3.2	9.5	19.1	0.0	7.9	22.2	7.9	17.5
Leo Carrillo State Beach	6.40	€	23	1.9	4.9	13.2	7.5	9.2	9.4	3.8	5.7	15.1	11.3	22.6
Sonoma Coast State Beach	7.67	8	169	2.4	9.0	9.0	3.0	5.9	7.1	4.7	13.0	25.4	16.0	24.3
Oregon														
Harris Beach State Park	8.20	.23	119	3.4	0.0	1.7	0.8	6.0	9.5	1.7	10.1	13.5	11.8	47.1
Jesse M. Honeyman	6	,	5	Ġ	1	0	((•	1			,	
Et Ctarren Clate Fair	1 0	<u>.</u>	2 5	o 6	<u>`</u> ;	90 c	0.0	0.0	4.2	2.5	10.8	21.7	18.3	40.0
ri. Sieveris State Park	06./	20.	20	9. O		ــ نن	4.	2.0	6. 9.3	4.0	14.7	20.7	11.4	33.3
Washington					,									
Olympic National Park	7.37	.21	128	8.0	9.0	3.9	1.5	3.1	11.7	9.4	13,3	21.1	4.6	25.0
Deception Pass State Park	7.56	.25	91	2.2		2.2	1.1	<u>-</u>	12.1	4.4	15.4	17.6	20.8	22.0

Table 21. Satisfaction Ratings on Water Quality.

		Standard						Ratir	Rating (Percent)	£				
State/Site	Mean	Error	z	0	-	2	က	4	2	ဖ	7	ω	6	10
California														
San Onofre State Beach	6.81	.27	79	<u>د</u> .	L .	2.5	2.5	9./	17.7	8.9	12.7	21.5	6.3	17.7
Cabrillo - Long Beach	3.85	.52	27	14.8	7.4	1.1	18.6	3.7	14.8	14.8	0.0	- -	3.7	0.0
Santa Monica Beaches	69.9	.32	61	0.0	0.0	4.9	3.3	19.7	8.2	8.6 6	9.9	21.3	8.2	18.0
Leo Carrillo State Beach	6.55	.38 .38	21	3.9	. 6:	5.0	2.0	5.9	21.6	3.9	15.7	23.5	5.9	13.7
Sonoma Coast State Beach	7.26	.20	163	6.9	9.0	1.8	2.5	6 .	9.6	5.5	16.6	19.6	16.6	20.3
Oregon														
Harris Beach State Park	8.10	<u>2</u> i	119	3.4	0.0	0.0	2.5	0.0	5.9	7.5	8.4	21.0	11.8	39.5
Jesse M. Honeyman	0	į	9	c c	0		0	o o	•	•	0	6	1	1
Memorial State Park	8.39	۲.	021	8.0	0.8	0.0	×.	0.0	4 .2	7.	13.3	22.5	16.7	30.7
Ft. Stevens State Park	7.53	ģ	150	4.7	0.7	0.0	2.0	2.7	10.0	8.6	10.6	16.7	14.0	30.0
Washington				•										
Olympic National Park	7.53	.28	115	8.7	0.0	0.8	0.0	3.5	9.6	5.6	9.5	14.8	15.7	34.8
Deception Pass State Park	7.54	.26	83	3.4	0.0	- :	0.0	8.9	11.2	6.8	5.6	23.6	15.7	25.8

유 Table 22. Satisfaction Ratings on Overall Condition of the Site.

State/Site California								Hatir	raing (reicent					
California	Mean	Error	z	0	-	2	ဇ	. 4	2	9	7	80	6	9
								į	ı					
San Choffe State Beach	6.23	78	82	1.2	4.9	7.3	2.4	6.1	15.9	7.3	17.1	18.3	12.2	7.3
Cabrillo - Long Beach	5.56	.45	27	3.7	0.0	3.7	-	18.5	1.1	11.1	18.6	14.8	3.7	3.7
Santa Monica Beaches	7.32	8	62	0.0	0.0	0.0	0.0	4.8	14.3	17.5	12.7	25.4	9.5	15.8
Leo Carrillo State Beach	7.64	.27	23	0.0	0.0	6.1	1.9	0.0	11.3	13.2	11.3	24.5	12.1	20.8
Sonoma Coast State Beach	7.49	1 .	169	1.2	1.2	0.0	3.0	23	6.5	9.5	18.9	22.5	21.9	13.0
Oregon											-			
Harris Beach State Park	8.59	14	119	0.0	0.0	0.8	0.0	0.0	4.2	8.3	5.9	17.5	27.5	35.8
Jesse M. Honeyman														,
Memorial State Park	8.58	41.	120	0.0	0.8	0.0	0.0	0.0	დ ლ	4.2	11.7	20.8	24.2	32.0
Ft. Stevens State Park	7.84	.17	152	0.7	2.0	0.7	5.6	0.7	5.3	5.9	12.1	23.6	21.7	21.7
Washington	1	,	1	6	(ć		,	;	ć	3	1	7	2
Olympic National Park	7.88	.16	12/	0.0	0.0	0.0	2.4	9.	0.1.	5.	1.8	27.6	6.4	4.4
Deception Pass State Park	7.52	<u>5</u>	92	- :	0.0	0.0	3.3	3.3	8.7	7.6	19.5	23.9	14.1	18.5

APPENDIX

A. Site Profiles - NOAA Inventory of Public Recreation Areas and Facilities in Coastal Areas.

HOAA HIVENTORY OF PUBLIC OUTDOOR RECREATION AREAS AND FACILITIES IN COASTAL AREAS, FY 1984

SITE NAME: SAN ONOFRE STATE BEACH	1984 ACREAGE BY COASTAL COUNTY	*
MANAGING AGENCY: CA PARKS & RECREATION	COUNTY ACRES	
LATITUDE - LONGITUBE: 3322N11735M		
**************************************	**************************************	[XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
ADJACENT TO OR INCLUDING A BODY OF WATER ADJACENT TO BODIES OF MATER UNDER TIDAL INFLUENCES YES ADJACENT TO OPEN OCEAN WATERS. YES OFFSHORE ON BARRIER ISLAND. NO	1984 2917 119 1982 2917 119 1972 2917 119 1972 2826 119 * 0 PERCENT OF THE 1984 ACREAGE	TOTAL 5036 5036 3036 3036 2945 IE IS IN
INVENTORY OF FACILITIES	BUDGET & PERSONNE	, ,
22 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	EXPENDITURES EXPENDITURES CAPITAL (\$) OPERATING (\$ 1984 60000 788156 1977 468724 1512333	# (FTE)
2488	USER DAYS - ATTI	ATTENDANCE
ALZCULTURAL SITES: 76	1984. 769. 1982. 560. 1977. 477. 1972. 197	1111 7783 532 715
MISSING INFORMATION CODES		
= SITE DID NOT EXIST = RECORDS NOT KEPT ON THIS DATA ELEMENT = RECORDS TOO COSTLY TO RETRIEVE = AGENCY DID NOT RESPOND TO SURVEY = AGENCY LOST RECORDS = SATELITTE PARK - DATA IN OTHER PARK = LATITUDE - LONGITUDE NOT FOUND	STRATEGIC ASSESSMENT BRANCH OCEAN ASSESSMENTS DIVISION OFFICE OF OCEANOGRAPHY AND MAI NATIONAL OCEAN SERVICE NATIONAL OCEANIC AND ATMOSPHELUS. DEPARTMENT OF COMMERCE PHONE (301) 443-8843/8921	MARINE ASSESSMENTS HERIC ADMINISTRATION

NOAA INVENTORY OF PUBLIC OUTDOOR RECREATION AREAS AND FACILITIES IN COASTAL AREAS, FY 1984

1984 ACREAGE BY COASTAL COUNTY * COUNTY ACRES LOS ANGELES 2151 VENTURA .	**************************************	BUDGET & PERSONNEL EXPENDITURES REVENUE PERSONNEL 1984 1982 1984 1977 1052453 1977 1052453 1977 1052453 1977 10584 1196903 1984 1196905 1977 490256 1977 490256	STRATEGIC ASSESSMENT BRANCH OCEAN ASSESSMENTS DIVISION OFFICE OF OCEANOGRAPHY AND MARINE ASSESSMENTS NATIONAL OCEAN SERVICE PHONE (301) 443-8843/8921
SITE NAME: LEO CARRILLO STATE BEACH Managing Agency: ca parks & recreation Latitude - Longitude: 3402H11856W	ADJACENT TO OR INCLUDING A BODY OF WATER TOOL TO OR INCLUDING A BODY OF WATER TOOL TO OR INCLUDING A BODY OF WATER TOOL TO OPEN OCEAN WATERS. ADJACENT TO OPEN OCEAN WATERS. ON BARRIER ISLAND. ON CEAN ISLAND. ON CANANTEMAYMENT ISLAND. ON UNCLASSIFIED ISLAND. NO	ARTIFICIAL REEFS FISHING PIERS BOAT RAMPS BOAT SLIPS BO	MISSING INFORMATION CODES B = RECORDS NOT EXIST C = RECORDS NOT KEPT ON THIS DATA ELEMENT C = RECORDS NOT COSTITY TO RETRIEVE D = AGENCY DID NOT RESPOND TO SURVEY E = AGENCY LOST RECORDS F = SATELITIE PARK - DATA G = LATITUDE - LONGITUDE NOT FOUND ***********************************

HOAA IHVEHTORY OF PUBLIC OUTDOOR RECREATION AREAS AND FACILITIES IN COASTAL AREAS, FY 1984

1984 ACREAGE BY COASTAL COUNTY *	CURRY ACRES CURRY 173	采茶菜菜菜菜菜菜菜菜菜菜菜菜菜菜菜菜菜菜菜菜菜菜菜菜菜菜菜菜菜菜菜菜菜菜菜菜	ACREAGE	1984 B	BUDGET & PERSONNEL	EXPENDITURES REVENUE PERSONNEL	CAPITAL (\$) OPERATING (\$) \$ (FTE) 1984 127 215306 186662 13.0 259712 16491 B 1977 76878 144168 B B B	FT	USER DAYS - ATTENDANCE	1984 516342 1982 301633 1977 802772 1972 768627		MENT DCEAN ASSESSMENTS DIVISION OCEAN ASSESSMENTS DIVISION OFFICE OF OCEANORAPHY AND MARINE ASSESSMENTS NATIONAL OCEAN SERVICE ADMINISTRATION NATIONAL OCEAN ATMOSPHERIC ADMINISTRATION OF SOCIAL OFFICE AND ATMOSPHERIC ADMINISTRATION OF SOCIAL OFFICE OFFICE AND ATMOSPHERIC ADMINISTRATION OF SOCIAL OFFICE ADMINISTRATION OFFICE ADMI
SITE NAME: HARRIS BEACH STATE PARK	MANAGING AGENCY: OR PARKS & RECREATION	LATITUDE - LONGITUDE: q20qH12q18M ************************************	TYPE OF ARE	ADJACENT TO OR INCLUDING A BODY OF WATER YES ADJACENT TO BODIES OF WATER UNDER TIDAL INFLUENCES YES ADJACENT TO OPEN OCEAN WATERS YES OF SHORE	INVENTORY OF FACILITIES		ARTIFICIAL REEFS FISHING PIERS BOAT RAMPS BOAT SLIPS BOAT SLIPS CAMPSITES (RV AND TEN)		16	ULT TES	MISSING INFORMATION CODES	A = SITE DID NOT EXIST B = RECORDS NOT KEPT ON THIS DATA ELEMENT C = RECORDS TOO COSILY TO RETRIEVE D = AGENCY DID NOT RESPOND TO SURVEY E = AGENCY LOST RECORDS F = SATELITE PARK - DATA IN OTHER PARK G = LATITUDE - LONGITUDE NOT FOUND ************************************

HOAA INVEHTORY OF PUBLIC OUTDOOR RECREATION AREAS AND FACILITIES IN COASTAL AREAS, FY 1984

1984 ACREAGE BY COASTAL COUNTY * COUNTY SOUNTY ACRES		**************************************	1984 LAND WATER TOTAL 1982 B 5633 1977 B B 2809 1972 B B 1995 1972 K O PERCENT OF THE 1984 ACREAGE IS IN	BUDGET & PERSONNEL EXPENDITURES REVENUE PERSONNEL	ING (¢) † 885879 183263 832918 108330 771720 89824 326447 27199		USER DAYS – ATTENDANCE	1984 1431707 1982 1238166 1977 1586911 1972 929651		LEMENT OCEAN ASSESSMENTS DIVISION OFFICE OF OCEANOGRAPHY AND MARINE ASSESSMENTS HATIONAL OCEANIC SENVICE NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION U.S. DEPARTMENT OF COMMERCE PHONE (301) 443-8891 **********************************
SITE NAME: SONOMA COAST STATE BEACH MAHAGING AGENCY: CA PARKS & RECREATION	ATITUDE - LONGITUDE, 3823N12305W	***************************************	ADJACENT TO OR INCLUDING A BODY OF WATER ADJACENT TO BODIES OF WATER UNDER TIDAL INFLUENCES YES AFSTORE YES OFFSHORE OR WATERS. ON BARRIER ISLAND. ON BARRIER ISLAND ON OFF WATER OFFSHORE ON OFF WATER OFFSHORE ON OFF WATER OFFSHORE ON ON OFFSHORY ISLAND ON UNCLASSIFIED ISLAND.	INVENTORY OF FACILITIES	7	7658	2	PARKING SPACES AT ALL OTHER SITES.	MISSING INFORMATION CODES	A = SITE DID HOT EXIST B = RECORDS NOT KEPT ON THIS DATA ELEMENT C = RECORDS TOO COSTLY TO RETRIEVE D = AGENCY DID HOUT RESPOND TO SURVEY E = AGENCY LOST RECORDS F = SATELITIE PARK — DATA IN OTHER PARK G = LATITUDE — LONGITUDE NOT FOUND ***********************************

HOAA INVENTORY OF PUBLIC OUTDOOR RECREATION AREAS AND FACILITIES IN COASTAL AREAS, FY 1984

NOAA INVENTORY OF PUBLIC OUTDOOR RECREATION AREAS AND FACILITIES IN COASTAL AREAS, FY 1984

MANAGING AGENCY: OR PARKS 8 RECREATION	COUNTY ACRES
	CLATSOP 3763
	发展系统统统统统统统统统统统统统统统统统统统统统统统统统统统统统统统统统统统统
	ACREAGE
ADJACENT TO OR INCLUDING A BODY OF WATER ADJACENT TO BODIES OF WATER UNDER TIDAL INFLUENCES YES ADJACENT TO OPEN OCEAN MATERS. OFSHORE ISLAND. ON BARRIER ISLAND. ON OPEN OCEAH ISLAND ON OF ESTUARYZEMBAYMENT ISLAND. ON UNCLASSIFIED ISLAND. NO	1984 LAND WATER TOTAL 3763 1982 B 5763 1977 B B 5763 1972 B B 5763 1972 B S763
INVEHTORY OF FACILITIES	PERSONNEL
	EXPENDITURES REVENUE PERSONNEL CAPITAL (\$) OPERATING (\$) \$ (FTE) 1984 4812 504208 408151 25.0 1977 97351 460962 369582 B 1972 111315 249296 B B
	USER DAYS - ATTENDANCE
ALZCUTŪRĀL SITĒS	1984 1110297 1982 667520 1977 1044089 1972 1528135
MISSING INFORMATION CODES	
A = SITE DID NOT EXIST B = RECORDS NOT KEPT ON THIS DATA ELEMENT C = RECORDS TOO COSTLY TO RETRIEVE D = AGENCY DID NOT RESPOND TO SURVEY E = AGENCY LOST RECORDS F = SATELITE PARK - DATA IN OTHER PARK G = LATITUDE - LONGITUDE NOT FOUND	STRATEGIC ASSESSMENT BRANCH DCEAN ASSESSMENTS DIVISION OFFICE OF OCEANORAPHY AND MARINE ASSESSMENTS NATIONAL OCEAN SERVICE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION U.S. DPARTMENT OF COMMERCE PHONE (301) 443-8843/8921

NOGA INVENTORY OF PUBLIC OUTDOOR RECREATION AREAS AND FACILITIES IN COASTAL AREAS, FY 1984

Trude Limitional park Service Cloud, Law and 200925	SITE NAME! OLYMPIC NATIONAL PARK	1984 ACREAGE BY COASTAL	TAL COUNTY .		
TIUDE - LONGITURE 4748N12342W URB		Ам . WA	ACRES		
ACENT TO GRAINGLUDING A BODY OF WATER VES 16	- LONGITUDE: 4748NI2342W	S HARBOR . RSON , WA	10769 537325 35099		
NUCLASS TYPE OF AREA	医鼠虫甲虫毒尿病 医电电影电影电影电影电影电影电影电影电影电影电影电影电影电影电影电影电影电影电	*		***************************************	***************************************
MACENT TO DR. INCLUDING & BODY OF WATER VES 1984		ı	la l		
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