Technical Appendix: Socioeconomic Profiles, Economic Impact/Contribution, and Importance-Satisfaction Ratings of Recreating Visitors to the Outer Coast of Washington and the Olympic Coast National Marine Sanctuary: Volume 4, 2014

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Technical Appendix: Socioeconomic Profiles, Economic Impact, and Importance-Satisfaction Ratings of Recreating Visitors to the Outer Coast of Washington and the Olympic Coast National Marine Sanctuary: Volume 4, 2014

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Abstract

This is the Technical Appendix to three reports of findings produced for a project focused on outdoor recreational users from households in the State of Washington who visited the state's Outer Coast to engage in coastal and ocean related activities in 2014. These reports include the results of estimations for demographic profiles, activity profiles, expenditure profiles, and economic impact estimates of the spending on local area economies. Details of the survey methodology and methods of estimation are provided in this Technical Appendix. The purpose of this document is to provide details on estimation methods to a technical audience that may want to replicate results found in the main reports (that only include results) and for peer reviewers.

Key Words

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1. Introduction

Background

In 2013-14, Point97 and the Surfrider Foundation conducted an Internet survey using a panel from Knowledge Networks (KN), a marketing research firm. The panel included a random sample of households in the State of Washington. The survey was funded by the State of Washington to support their Marine Spatial Planning process and addressed visitation to the Outer Coast of Washington with emphasis on outdoor recreational activities. The survey covered user visitation to the Outer Coast over the past 12 months. It also solicited information on detailed recreational activities participated in over the 12 month period and on the last trip. Information on the respondent's last trip to the outer coast was collected for two important reasons. First, respondents provided trip expenditure information so that expenditure profiles of visitors and their economic contributions to the local economy can be estimated. Second, respondents provided information on where, spatially, they engaged in particular types of activities during their last trip. This spatial information was used to estimate the spatial intensity of use by types of recreational activities along the Outer Coast (OC). Demographic information of the users was also collected to build user profiles, and to help understand how population changes may impact use and economic impacts. This data was obtained for all respondents and spatial use was obtained for all respondents who had visited the Outer Coast of Washington over the past 12 months using a tool developed by Ecotrust/Point97.

In 2014, two offices in NOAA's National Ocean Service (NOS), (1) the Office of National Marine Sanctuaries (ONMS), Conservation Science Division and (2) the National Centers for Coastal Ocean Sciences (NCCOS), partnered to obtain information on the preferences and non-market economic values of visitors to the Outer Coast of Washington and how those non-market values change with changes in natural resource attributes and visitor characteristics. NCCOS provided funding and ONMS issued a request for proposals to provide the information. Through the competitive bidding process Point97 was awarded the contract and proposed to use their existing Internet panel with KN to conduct a second wave of surveying.

NOAA's objectives included collecting information on respondents' preferences for different marine animals (e.g., seabirds and marine mammals), ecological worldviews, and non-market economic values for select natural resource attributes. All the data obtained for the second wave of surveys also included the same information obtained by Point97 in their first wave of surveys. In this report, the non-market economic values are not addressed; instead a separate technical appendix will address respondents' preferences for different marine animals, ecological worldviews, and non-market economic values.

Survey Methodology

Detailed survey methodology is presented in Chen et al. (2015), but a summary is provided here. The survey was implemented using the KN panel of Washington households. To accommodate the needs of the State of Washington and NOAA, KN supplemented their regular panel with additional recruits to expand sample sizes.

The survey was administered in two waves. The first wave was conducted from June 13-30, 2014 and included 3,017 households. The second wave was conducted from November 19, 2014 to February 14, 2015 and included 3,112 households. The two waves resulted in a total of 6,129 households surveyed. KN recruited panel members to obtain a random sample representative of all households in the Washington using random digit dialing by telephone, including cell phones. The sampling frame included residents 18 years or older living in State of Washington households.

Survey Response Rates. Out of the 6,129 panel members across both waves, 5,538 households responded for a response rate of 90.36%. For wave 1, the response rate was 100% (N=3,017), while for wave 2 the response rate was 81% (N=2,521).

Sample Weighting. KN provided sample weights for the panel to make them representative of all Washington households. KN weighted the sample for four factors: age, gender, race/ethnicity and county of residence. County of residence was used since mapping spatial patterns of use was conducted and spatial use would be related. Two sets of weights were provided: weight1 was the sample weight for the regular KN panel members and weight2 was the weight for the full panel. Weight2 was used for the estimates of this study as the entire panel was included.

What was Estimated?

- Demographics – Who are the Users?
- Recreational Use and Type of Uses
    1. Percent of Washington households that visited the Outer Coast in the past 12 months.
    2. Number of recreation trips per household to the Outer Coast in the past 12 months.
    3. Number of people on last trip per household to the Outer Coast for recreation.
    4. Recreation activity participation rates (percent of households) by activity type in the Outer Coast during the past 12 months.
    5. Recreation activity participation rates (percent of households) by activity type in the Outer Coast on the last trip.
    6. Person-trips and person-days to Outer Coast for recreation past 12 months.
    7. Person-trips and person-days by recreation activity/activity group type past 12 months.

8. Spatial distribution of uses by activity type (person-trips and person-days).
- Expenditures by Category of Expenditure
    1. Per household group per trip (last trip).
    2. Per person-trip (last trip).
    3. Per person-day (last trip and annual average)
    4. Total Annual Expenditures
- Economic Impact/contribution to Local Area Economies
    1. Output
    2. Value added
    3. Income
    4. Employment (full and part-time jobs)
- Importance-Satisfaction Ratings for 25 Natural Resource Attributes, Facilities, & Services

Jurisdictions/Sub-areas for Estimation. For each of the measures above, separate estimates for the following different management jurisdictions or sub-areas were made.

1. Outer Coast (all 6,129 households),
2. OCNMS – as defined by the legal definition of the sanctuary,
3. OCNMS-2 km – as defined by the legal definition of the sanctuary with a 2km buffer,
4. Port Angeles (area near the shoreline where the OCNMS Headquarters and Visitor Center and the Fiero Life Center and possible site for a new visitor Center, defined by George Galasso, OCNMS).

Figure 1.1 shows the OCNMS in addition to other jurisdictions. Although this report does not analyze the smaller jurisdictions and sub-areas, they are presented on the map to provide additional information about the areas surrounding the OCNMS and along the Outer Coast.
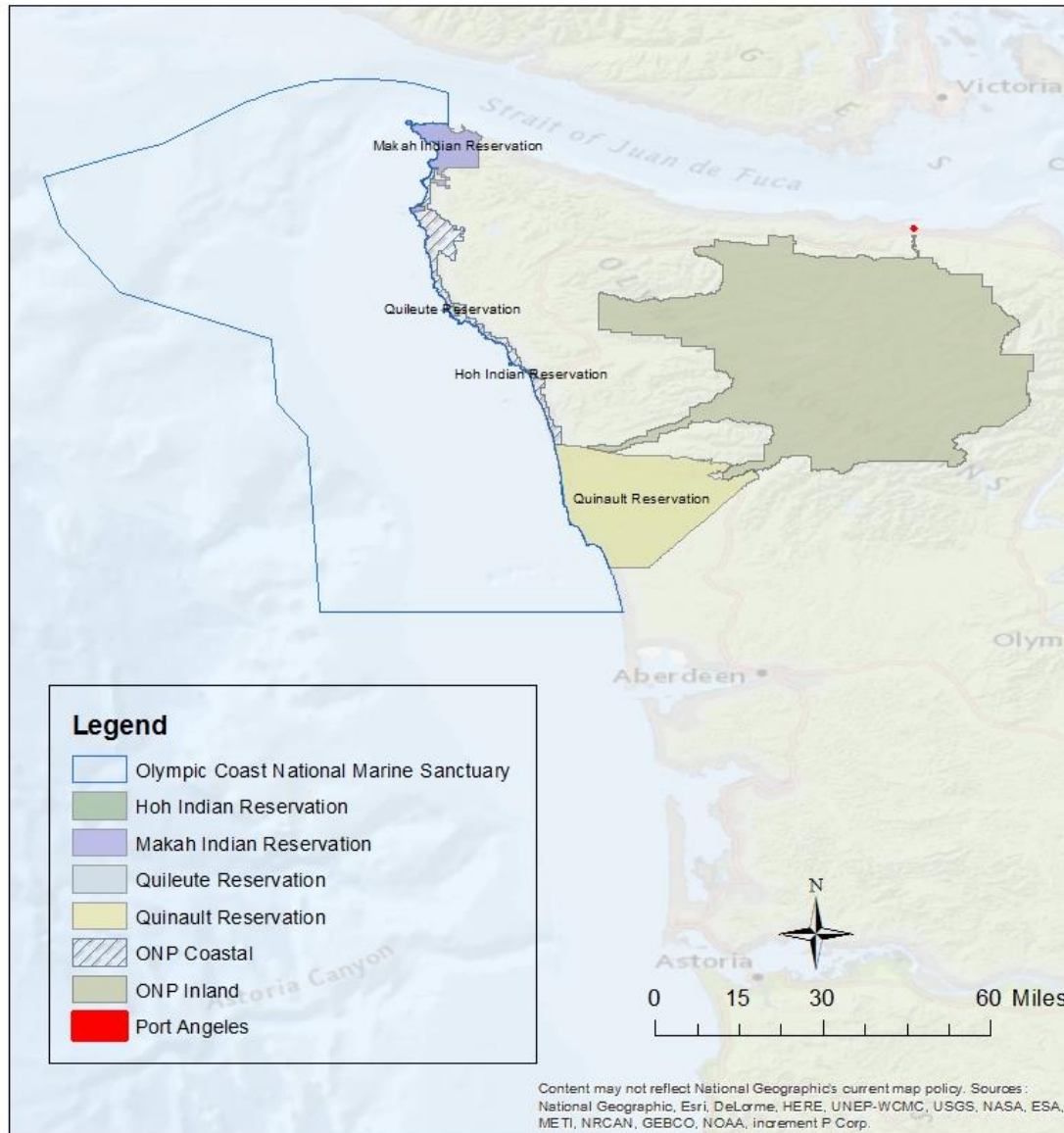
Figure 1.1 Map of the Jurisdictions/sub-areas for the Outer Coast of Washington

Sample Sizes for Estimation

An important limitation of the data is that mapped data and expenditures were only obtained for the last trip. Thus, spatial distributions of activities during the last trip were used to distribute the annual person-days by activity/activity group and required the assumption that the last trip was representative of all annual trips. The same is true for expenditures.

The spatial distribution of activities during the last trip was also used to derive the proportion of use in each of the jurisdictions/sub-areas. About 48% (2,672/5,538) of all survey respondents completed the mapping exercise, so this further limited available sample sizes for identifying where survey respondents did their activities.

Table 1.1 shows the sample sizes available to estimate different project measures by jurisdiction or sub-area. Adequate sample sizes were available for most objectives. Objectives included identifying statistically significant differences in demographic comparisons by jurisdiction/sub-areas, statistically reliable estimates of recreation use by activity, statistically reliable estimation of expenditures by expenditure category, and statistically reliable estimates of importance-satisfaction ratings. The criterion for statistically reliable estimation was estimation with 95 percent confidence or the 0.05 level of significance. As noted above, however, there were not adequate sample sizes to produce estimates for the Hoh Tribal Reservation.

For expenditures, some of the sub-areas' sample sizes were relatively small, but reliable estimates were developed for Port Angeles, ONP-Inland, the Makah, Quileute and Quinault Nation Reservations. For importance-satisfaction ratings, sample sizes were inadequate to support estimation for Port Angeles (N=14-15), ONP – Inland (N=19-24), and all the Coastal Treaty Tribes: Makah (N=12-27), Quileute (N=8-14), and the Quinault Nation (N=7-10). The reason for the small sample sizes for importance-satisfaction ratings was that they were only included in the wave 2 of the survey. The lower numbers in Table 1.1 for importance-satisfaction ratings were for items many did not think were relevant to them (e.g., handicap facilities), so they answered "Not Applicable" (See Appendix B for the questionnaire).

Table 1.1 Sample Sizes for Estimation

Jurisdiction/sub-area	Demographics, Uses, Expenditures	% of Sample[1]	Importance-Satisfaction Ratings[2]	Mapped Data Points	% of Sample[1]
1. Outer Coast (entire study area)	2,378	100.00	645 - 1,011	10,980	100.00
2. OCNMS - Legal Definition	112	4.71	30 - 60	554	5.05
3. OCNMS - 2 km buffer	364	15.31	89 - 162	1,756	15.99
4. Port Angeles	31	1.30	14 - 15	125	1.14

1. Unweighted sample percent.
2. Range of number of sample for the 25 items rated.

2. Uses

What was estimated for Uses?

All of the information used to document and characterize recreational activity was obtained through implementation of the survey questionnaires. The questionnaire for wave 1 is included in Appendix A and the questionnaire for wave 2 is included in Appendix B.

Estimates were made for the following:

1. Percent and number of Washington households that visited the Outer Coast in the past 12 months.
2. Number of trips per household where at least one recreation activity was undertaken in the past 12 months.
3. Number of people on last trip per household to the Outer Coast for recreation.
4. Recreation activity participation rates (percent of households) by activity type in the Outer Coast during the past 12 months.
5. Recreation activity participation rates (percent of households) by activity type in the Outer Coast on the last trip.
6. Person-trips and person-days to Outer Coast for recreation in the past 12 months.
7. Person-trips and person-days by recreation activity/activity group type in the past 12 months.
8. Spatial distribution of uses by activity type (person-trips and person-days).

Measurements 5 through 9 were estimated by jurisdiction or sub-area. Measurements 1 through 6 were reported in Chen et al. (2015), but are repeated here. Chen et al. (2015) also presented the spatial distribution of person-trips by activity groups. This report added the spatial distribution of person-days by activity group. The data could be used to display the spatial distribution of individual activities, but this information was not provided in the reports.

Number of Households that have been to the Outer Coast past 12 months

Survey respondents in both waves were first screened for whether they had visited the Outer Coast (OC) of Washington during the past 12 months defined as the variable 'been_to_coast'. (In the remainder of the document, parenthesis are used to indicate the variable name used in the software to complete statistical analysis of the data). It was estimated that 40.7% of Washington households had been to the OC during the past 12 months. There were 2,624,689 households in the State of Washington in 2010 (U.S. Department of Commerce, Bureau of the Census, 2010 Census of Population. The analysis also revealed that an estimated 1,067,892 Washington households had been to the OC during the past 12 months.

Annual Number of Person-trips and Person-days for Recreation

Two important measures of recreation are the annual number of person-trips and person-days. A person-trip is equal to one person who makes a trip. Calculating a person-trip for each sample respondent requires an estimate of the number of trips made to the OC in which at least one recreation activity was undertaken (rec_trips) and the number of passengers with the household on each trip. The number of passengers on the last trip (passengers_total) was used as the best estimate of the average on each trip.

Person-trips = rec_trips * passengers_total

where,

rec_trips = Number of Recreation Trips to the OC past 12 months
Passengers_total = Number of passengers on the last trip

On average, households that had been to the OC in the past 12 months and made at least one recreation trip made 1.76 recreational trips. There were, on average, 2.75 people in the traveling group from the household yielding 4.88 person-trips per household per year (Table 2.1).

A person-day is defined as one person doing any recreation activity for a whole day or any part of a day, so people could do several person-days of activities in a single day. Estimates of person-days were normalized to account for double counting across activities (see Number of Person-trips and Person-days by Activity below).

Person-days were calculated by using the length of stay measured in days per trip. Length of stay was obtained for the last trip (days_stay) and was multiplied by the number of annual person-trips by each sample user.

Person-days = person_trips * days_stay

The sample average length of trip was estimated at 4.88 days, multiplying this by person-trips yielded an estimate and average number of annual person-days of 12.28 days (Table 2.1).

The estimates in Table 2.1 were the result of first eliminating outliers. All observations with more than 50 trips per year, all that had lengths of stay greater than 90 days, and all numbers of passengers greater than 11 were eliminated. See Appendix C for more details on the outlier analysis.

To develop population estimates of person-trips and person-days, two methods of calculation were estimated. For method 1, the sample average of person-trips and person-days per household and multiplied it by the number of households that had been to the

OC for recreation in the past 12 months (1,067,892 see section above). Method 2 multiplied the sample averages in Table 2.1 for the component parts of each calculation of person-trips and person-days.

Method 1

Annual Person-trips = mean average annual person-trips * the number of households that made a trip in the past 12 months

Annual Person-trips =4.88 * 1,067,892 = 5,208,552
Annual Person-days=12.29* 1,067,892=13,122,070

Table 2.1 Average Number of Trips, Recreation Trips, Number of People on Trips, Length of Stay, Person-trips and Person-days for the Outer Coast

Measurement[1]	Mean[2]	Standard Error of of the Mean	95% Confidence Interval	N	Min	Max
Number of Recreation Trips to Outer Coast past 12 months (rec_trips)	1.76	0.04	1.68 to 1.84	2,352	1	30
Number of Passengers on last trip (passengers_total)	2.75	0.029	2.69 to 2.81	2,128	1	11
Length of Stay last trip in days (days_stay)	2.76	0.047	2.67 to 2.85	2,346	1	30
Person-trips for recreation during past 12 months (person_trips)	4.88	0.146	4.59 to 5.17	2,128	1	90
Person-days for recreation during past 12 months (person_days)	12.28	0.424	11.45 to 13.11	2,123	1	384

1. Database variable names in parentheses.
2. Sample weighted means.

Method 2

Mean Person-trips = mean rec_trips (1.76) * mean passengers_total (2.75)= 4.85

Annual Person-trips = mean person-trips (4.85) * 1,067,892 = 5,180,121

Mean Person-days = mean person-trips (4.85) * mean length of stay (2.76) = 13.38

Annual Person-days = mean person-days * 1,067,892 = 14,289,672

The differences in the two methods were relatively small for person-trips, with Method 1 yielding an estimate of only about one-half a percent above that for Method 2. For person-days, the difference was more significant, with Method 2 yielding an estimate almost nine percent higher than Method 1. Method 1 was chosen for all further applications because it accounts for the variation across the sample for each component of the calculations.

Number of Person-trips and Person-days by Activity

To estimate person-trips and person-days by activity, two methods of calculation mirroring the method of calculations above to total person-trips and person-days were estimated. Method 2 will not be shown here because as explained above, it was decided that Method 1 would be the approach used for final estimates.

Person-trips by Activity

Table 2.2 shows how the estimates were normalized for total annual person-trips by activity to account for double-counting across activities. This was done so that person-trips is additive across activities to form activity groups.

Column 2 in Table 2.2 contains the weighted sample average number of person-trips per household by activity. This number was then multiplied by the number of households to get the total number of person-trips in column 3. Column 3 contains double-counting across activities with the sum across all activities equal to 26,672, 300. The next step was to normalize the estimates using the percent distribution of the Column 3 estimates (Column 4). Column 4 was then used to distribute the total annual person-trip estimate by the Column 4 percentages to yield the estimates in Column 5 (Normalized Annual Person-trips).

Person-days by Activity

The same procedures used to estimate person-trips by activity were used for estimating person-days by activity. Table 2.3 provides the results.

Table 2.2 Estimation of Person-trips by Activity

Activity	Sample Average Person-trips	Person-trips	Percent of Sample	Normalized Annual Person-trips
Total	4.88	5,208,552		5,208,552
Other	0.00137	1,467	0.01	286
Beach Going	3.54	3,776,847	14.16	737,541
Beach Driving	1.36	1,454,319	5.45	283,999
Hiking/Biking	1.89	2,019,122	7.57	394,293
Camping	1.77	1,888,274	7.08	368,741
Photography	1.75	1,864,267	6.99	364,053
Sightseeing	3.15	3,364,317	12.61	656,982
Sitting in Car	1.37	1,467,216	5.50	286,517
Collecting Nonliving Resources	1.54	1,641,755	6.16	320,601
Watching Wildlife from Shore	2.19	2,338,912	8.77	456,741
Watching Wildlife from Private	0.23	247,383	0.93	48,309
Watching Wildlife from Charter	0.15	158,008	0.59	30,856
Horseback Riding	0.25	264,351	0.99	51,622
Tide Pooling	1.12	1,198,457	4.49	234,034
Fishing from Shore	0.69	735,200	2.76	143,569
Fishing from Private	0.39	413,124	1.55	80,675
Fishing from Charter	0.29	311,232	1.17	60,777
Collecting Living Resources	1.04	1,107,346	4.15	216,242
Parasailing	0.02	20,739	0.08	4,050
Skim Boarding	0.06	67,157	0.25	13,114
Surfing	0.21	226,212	0.85	44,174
Swimming	0.98	1,045,893	3.92	204,241
Windsurfing	0.05	53,150	0.20	10,379
Snorkeling from Shore	0.03	26,773	0.10	5,228
Snorkeling from Private	0.02	20,420	0.08	3,988
Snorkeling from Charter	0.03	28,462	0.11	5,558
Personal Watercraft	0.11	116,102	0.44	22,672
Kayaking	0.34	368,337	1.38	71,929
Boating	0.35	375,768	1.41	73,380
SCUBA from Shore	0.04	37,740	0.14	7,370
SCUBA from Private	0.03	29,587	0.11	5,778
SCUBA from Charter	0.00	4,363	0.02	852
Sum		26,672,300	100.00	

Table 2.3 Estimation of Person-days by Activity

Activity	Sample Average Person-days	Person-days	Percent of Sample	Normalized Annual Person-days
Total	12.29	13,122,070		13,122,070
Other	0.0029	3,101	0.00	570
Beach Going	9.20	9,829,732	13.77	1,807,380
Beach Driving	3.80	4,057,482	5.69	746,044
Hiking/Biking	5.32	5,676,731	7.95	1,043,773
Camping	5.29	5,646,013	7.91	1,038,125
Photography	4.79	5,110,159	7.16	939,598
Sightseeing	8.18	8,732,984	12.24	1,605,723
Sitting in Car	3.44	3,675,961	5.15	675,894
Collecting Nonliving Resources	4.18	4,463,301	6.25	820,662
Watching Wildlife from Shore	5.59	5,965,724	8.36	1,096,910
Watching Wildlife from Private	0.66	708,665	0.99	130,301
Watching Wildlife from Charter	0.53	563,213	0.79	103,557
Horseback Riding	0.75	800,706	1.12	147,225
Tide Pooling	3.21	3,427,036	4.80	630,125
Fishing from Shore	1.99	2,127,970	2.98	391,267
Fishing from Private	0.85	905,512	1.27	166,495
Fishing from Charter	0.63	677,680	0.95	124,604
Collecting Living Resources	2.67	2,847,072	3.99	523,487
Parasailing	0.03	30,578	0.04	5,622
Skim Boarding	0.14	154,600	0.22	28,426
Surfing	0.27	291,917	0.41	53,674
Swimming	2.71	2,893,577	4.05	532,038
Windsurfing	0.16	174,181	0.24	32,027
Snorkeling from Shore	0.06	61,759	0.09	11,355
Snorkeling from Private	0.02	17,496	0.02	3,217
Snorkeling from Charter	0.08	81,545	0.11	14,994
Personal Watercraft	0.26	275,355	0.39	50,629
Kayaking	0.91	973,285	1.36	178,957
Boating	1.01	1,078,750	1.51	198,348
SCUBA from Shore	0.06	61,900	0.09	11,381
SCUBA from Private	0.04	44,272	0.06	8,140
SCUBA from Charter	0.01	8,254	0.01	1,518
Sum		71,366,512	100.00	

Number of Person-trips and Person-days by Jurisdiction or sub-area

The estimation of the amount of use by jurisdiction or sub-area required the use of the spatial use information. Only 48% of the entire sample of recreators completed the mapping exercise. The sample sizes by jurisdiction or sub-area are provided in Table 1.1.

To estimate person-trips and person-days by jurisdiction or sub-area and by activity, the proportion of all mapped data points in each jurisdiction or sub-area was used. The percentages of total map points in each jurisdiction were multiplied by the control totals for person-trips (5,208,552) and person-days (13,122,070) for the entire OC study area to get estimates of person-trips and person-days in each jurisdiction. Table 2.4 contains the information used in the calculations.

Table 2.4 Estimation of Person-trips and Person-days by Jurisdiction or sub-area

Jurisdiction or sub-area	Number of Map Data Points	% of Map Data Points[1]	Annual Person-trips	Annual Person-days
Outer Coast (entire study area)	10,980	100	5,208,552	13,122,070
OCNMS - Legal Definition	554	5.05	262,799	662,079
OCNMS - 2 km buffer	1,756	15.99	832,989	2,098,575
Port Angeles	125	1.14	59,296	149,386

1. Rounded to two decimal places here, values used in calculation were more precise.

Number of Person-trips and Person-days by Activity Type and Jurisdiction or sub-area

To estimate person-trips and person-days by activity and jurisdiction or sub-area, the control total estimated and shown in Table 2.4 was distributed by the percentage of map data points by activity within each jurisdiction or sub-area so that person-trips and person-days by activity add to the total number of person-trips and person-days estimated for each jurisdiction or sub-area as shown in Table 2.4. Person-trips and person-days are each additive across activities. Person-trips or person-days for an activity group are simply the sum of the person-trips or person-days of the activities in the group. The results of the calculations for each jurisdiction or sub-area are detailed in Tables 2.5 to 2.11.

Table 2.5 Estimation of Person-trips and Person-days by Activity: OCNMS - Legal

Activity	Number of Mapped Data Points	% of Mapped Data Points	Annual Person-trips	Annual Person-days
Beach Going	77	13.90	36,526	92,022
Beach Driving	24	4.33	11,385	28,682
Hiking/Biking	41	7.40	19,449	48,999
Camping	38	6.86	18,026	45,413
Photography	38	6.86	18,026	45,413
Sightseeing	72	13.00	34,154	86,046
Sitting in Car	26	4.69	12,334	31,072
Collecting Nonliving Resources	39	7.04	18,500	46,608
Watching Wildlife from Shore	47	8.48	22,295	56,169
Watching Wildlife from Private	9	1.62	4,269	10,756
Watching Wildlife from Charter	4	0.72	1,897	4,780
Horseback Riding	7	1.26	3,321	8,366
Tide Pooling	39	7.04	18,500	46,608
Fishing from Shore	10	1.81	4,744	11,951
Fishing from Private	3	0.54	1,423	3,585
Fishing from Charter	3	0.54	1,423	3,585
Collecting Living Resources	21	3.79	9,962	25,097
Parasailing	2	0.36	949	2,390
Skim Boarding	1	0.18	474	1,195
Surfing	4	0.72	1,897	4,780
Swimming	17	3.07	8,064	20,317
Windsurfing	1	0.18	474	1,195
Snorkeling from Shore	3	0.54	1,423	3,585
Snorkeling from Private	1	0.18	474	1,195
Snorkeling from Charter	1	0.18	474	1,195
Personal Watercraft	4	0.72	1,897	4,780
Kayaking	9	1.62	4,269	10,756
Boating	8	1.44	3,795	9,561
SCUBA from Shore	2	0.36	949	2,390
SCUBA from Private	1	0.18	474	1,195
SCUBA from Charter	2	0.36	949	2,390
Total	554	100.00	262,799	662,079

Table 2.6 Estimation of Person-trips and Person-days by Activity: OCNMS – 2 km

Activity	Number of Mapped Data Points	% of Mapped Data Points	Annual Person-trips	Annual Person-days
Beach Going	258	14.69	122,387	308,303
Beach Driving	75	4.27	35,578	89,623
Hiking/Biking	164	9.34	77,796	195,976
Camping	120	6.83	56,924	143,397
Photography	126	7.18	59,770	150,567
Sightseeing	249	14.18	118,117	297,549
Sitting in Car	88	5.01	41,744	105,158
Collecting Nonliving Resources	116	6.61	55,027	138,617
Watching Wildlife from Shore	162	9.23	76,848	193,586
Watching Wildlife from Private	20	1.14	9,487	23,899
Watching Wildlife from Charter	14	0.80	6,641	16,730
Horseback Riding	14	0.80	6,641	16,730
Tide Pooling	115	6.55	54,552	137,422
Fishing from Shore	31	1.77	14,705	37,044
Fishing from Private	17	0.97	8,064	20,315
Fishing from Charter	9	0.51	4,269	10,755
Collecting Living Resources	43	2.45	20,398	51,384
Parasailing	3	0.17	1,423	3,585
Skim Boarding	5	0.28	2,372	5,975
Surfing	7	0.40	3,321	8,365
Swimming	48	2.73	22,770	57,359
Windsurfing	4	0.23	1,897	4,780
Snorkeling from Shore	5	0.28	2,372	5,975
Snorkeling from Private	2	0.11	949	2,390
Snorkeling from Charter	5	0.28	2,372	5,975
Personal Watercraft	4	0.23	1,897	4,780
Kayaking	25	1.42	11,859	29,874
Boating	20	1.14	9,487	23,899
SCUBA from Shore	2	0.11	949	2,390
SCUBA from Private	3	0.17	1,423	3,585
SCUBA from Charter	2	0.11	949	2,390
Total	1756	100.00	832,989	2,098,375

Table 2.7 Estimation of Person-trips and Person-days by Activity: Port Angeles

Activity	Number of Mapped Data Points	% of Mapped Data Points	Annual Person-trips	Annual Person-days
Beach Going	19	15.20	9,013	22,707
Beach Driving	3	2.40	1,423	3,585
Hiking/Biking	11	8.80	5,218	13,146
Camping	5	4.00	2,372	5,975
Photography	12	9.60	5,692	14,341
Sightseeing	21	16.80	9,962	25,097
Sitting in Car	9	7.20	4,269	10,756
Collecting Nonliving Resources	5	4.00	2,372	5,975
Watching Wildlife from Shore	15	12.00	7,116	17,926
Watching Wildlife from Private	1	0.80	474	1,195
Watching Wildlife from Charter	2	1.60	949	2,390
Horseback Riding	2	1.60	949	2,390
Tide Pooling	2	1.60	949	2,390
Fishing from Shore	1	0.80	474	1,195
Fishing from Private	0	0.00	0	0
Fishing from Charter	1	0.80	474	1,195
Collecting Living Resources	2	1.60	949	2,390
Parasailing	0	0.00	0	0
Skim Boarding	0	0.00	0	0
Surfing	1	0.80	474	1,195
Swimming	3	2.40	1,423	3,585
Windsurfing	2	1.60	949	2,390
Snorkeling from Shore	1	0.80	474	1,195
Snorkeling from Private	0	0.00	0	0
Snorkeling from Charter	0	0.00	0	0
Personal Watercraft	0	0.00	0	0
Kayaking	1	0.80	474	1,195
Boating	5	4.00	2,372	5,975
SCUBA from Shore	1	0.80	474	1,195
SCUBA from Private	0	0.00	0	0
SCUBA from Charter	0	0.00	0	0
Total	125	100.00	59,296	149,386

3. Demographics

In this chapter, comparative profiles were tested for differences in demographics between the OC, OCNMS-Legal, OCNMS- 2 km, and Port Angeles. For continuous factors such as age and household size, non-parametric tests were done in using the Kolmogorov-Smirnov two-sample test and the Kuiper two-sample exact test, testing the empirical distribution function (SAS V.9.4, NPAR1WAY procedure). For discrete variables such as, gender, race/ethnicity, marital status, head of household, housing type, employment status, educational level, and household income Chi-square tests with Bonferroni adjustments for experiment wise error were used (Table 3.1.1). Age was tested in three formats; age as a continuous variable, age in seven categories, and age in four categories. Education level was tested in two formats: education level in 14 categories and age in four categories. Household size was tested as a continuous variable, while household by age was tested as a categorical variable with five categories.

To perform the statistical tests the data was rearranged to form a group. Because people who did recreation activities in the OC could also do recreation activities in the any of the jurisdiction or sub-areas separate data files for each jurisdiction or sub-area were formed. Then the files were concatenated into pairwise groups for each section. Each sample area was treated as separate sample, but there was some correlation because of the overlapping users.

Comparative Profiles: OC, OCNMS-Legal, OCNMS-2 km and Port Angeles

Nine statistically significant differences were found between the six pairwise comparisons across the four jurisdictions (Table 3.1.1). For gender, there were two statistically significant differences: differences between OC and Port Angeles and OCNMS-2 km and Port Angeles. For race/ethnicity two statistical differences were found: OCNMS-Legal versus Port Angeles and OCNMS- 2 km versus Port Angeles. For education three differences were found: OC versus the OCNMS-Legal for the 14 category specification for education level; and for the four categories specification differences were found for OC versus OCNMS- Legal and for OC versus OCNMS- 2 km. For household income, two differences were found: OC versus Port Angeles and OCNMS- 2 km versus Port Angeles. The frequency distributions and statistical summary statistics for all demographic variables are in Tables 3.2 to 3.19.

Table 3.1 Statistical Tests for Differences in Demographics: OC, OCNMS-Legal, OCNMS 2km, and Port Angeles

Demographic Factor		OC versus OCNMS-Legal	OC versus OCNMS-2 km	OC versus Port Angeles	OCNMS-Legal versus OCNMS-2 km	OCNMS-Legal versus Port Angeles	OCNMS-2 km versus Port Angeles
Age (continuous)	KS[1,3]	0.3395	0.6572	0.7662	0.3156	0.9998	0.6012
	Kuiper[1,3]	0.4659	0.7391	0.8533	0.7672	0.9994	0.9589
Age (4 categories)	Chi-Square[4]	0.0948	0.0237	0.5363	0.1294	0.4865	0.3355
Age (7 categories)	Chi-Square[4]	0.1445	0.0101	0.4037	0.1766	0.3646	0.1937
Gender	Chi-Square[4]	0.2450	0.4450	**0.0042**	0.5220	0.0476	**0.0118**
Race/Ethnicity	Chi-Square[4]	0.1142	0.2315	0.0203	0.6716	**0.0074**	**0.0020**
Education Level (14 categories)	Chi-Square[4]	0.3251	**0.0003**	0.8600	0.7562	0.8041	0.6032
Education Level (4 categories)	Chi-Square[4]	**0.0088**	**<0.0001**	0.6503	0.3513	0.6909	0.5714
Head of Household	Chi-Square[4]	0.1695	0.1071	0.2352	0.6619	0.0672	0.0757
Household Size	KS[1,2]	0.8277	0.9997	0.3865	0.7126	0.1745	0.5542
	Kuiper[1,2]	0.9866	1.0000	0.9197	0.9781	0.6388	0.9646

Table 3.1 Statistical Tests for Differences in Demographics: OC, OCNMS-Legal, OCNMS 2km, and Port Angeles (Continued)

Demographic Factor		OC versus OCNMS-Legal	OC versus OCNMS-2 km	OC versus Port Angeles	OCNMS-Legal versus OCNMS-2 km	OCNMS-Legal versus Port Angeles	OCNMS-2 km versus Port Angeles
Household Size by Age	KS[1,2]	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
	Kuiper[1,2]	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Household type	Chi-Square[4]	0.9653	0.4549	0.7330	0.8620	0.7753	0.5445
Ownership of Living Quarters	Chi-Square[4]	0.3494	0.3222	0.4563	0.6508	0.8218	0.6643
Marital Status	Chi-Square[4]	0.4862	0.4073	0.3306	0.2657	0.5381	0.3627
Current Employment Status	Chi-Square[4]	0.5277	0.4604	0.2510	0.8791	0.4839	0.1912
Household Income	Chi-Square[4]	0.1243	0.1444	**<0.0001**	0.9034	0.1305	**0.0005**
Metropolitan Statistical Area Status	Chi-Square[4]	0.4822	0.5489	0.2512	0.3533	0.4541	0.2033

1. Kolmogorov-Smirnov (KS) two-sample test of significance. Significant divergence if less than or equal to 0.05.
2. Kuiper two-sample exact test of significance. Significant difference if less than or equal to 0.05.
3. Bold indicates statistically significant difference.
4. Chi-square test for all categorical variables with Bonferroni adjustment for experiment wise error.

Table 3.2 Age: OC, OCNMS-Legal, OCNMS 2-km, and Port Angeles

	Outer Coast	OCNMS Legal	OCNMS 2KM	Port Angeles
Minimum	18	19	18	19
Maximum	88	79	79	72
Mean	43.74	42.80	44.96	38.11
Median	43	38	44	36
Mode	36	31	44	26
Standard Error	0.33	1.63	0.8	2.76
N	2,372	112	364	31

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Table 3.3 Age (7 Categories): OC, OCNMS-Legal, OCNMS 2km and Port Angeles

Age	Outer Coast Recreators	OCNMS Legal	OCNMS 2km	Port Angeles
	(%)	(%)	(%)	(%)
18-24	13.42	17.41	9.44	22.48
25-34	20.61	22.77	18.79	19.08
35-44	19.52	20.7	27.83	24.2
45-54	16.76	9.26	14.39	20.15
55-64	18.24	15.39	15.87	4.53
65-74	9.95	10.24	11.37	9.55
75 and over	1.49	4.23	2.31	-

Table 3.4 Age (4 Categories): OC, OCNMS-Legal, OCNMS-2km and Port Angeles

Age	Outer Coast Recreators	OCNMS Legal	OCNMS 2KM	Port Angeles
	(%)	(%)	(%)	(%)
18-29	23.48	28.58	18.92	30.68
30-44	30.08	32.30	37.15	35.08
45-59	26.29	15.22	21.99	22.32
60 and over	20.16	23.90	21.94	11.92
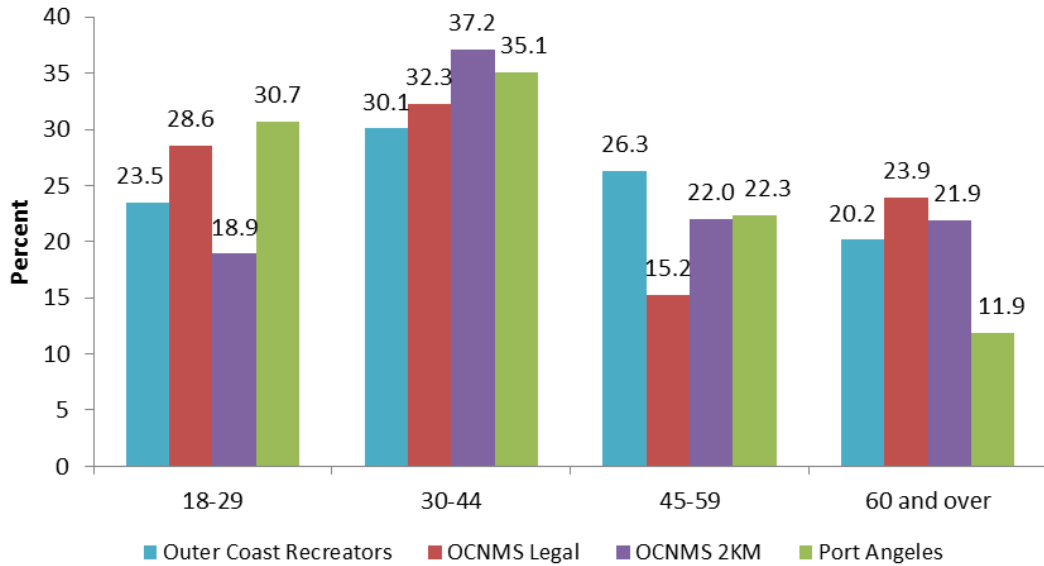
Figure 3.1 Age (4 Categories): OC, OCNMS-Legal, OCNMS-2km and Port Angeles

Table 3.5 Gender: OC, OCNMS-Legal, OCNMS-2km and Port Angeles

Gender	Outer Coast Recreators (%)	OCNMS Legal (%)	OCNMS 2KM (%)	Port Angeles (%)
Male	50.36	56.31	52.64	76.06
Female	49.64	43.69	47.36	23.94
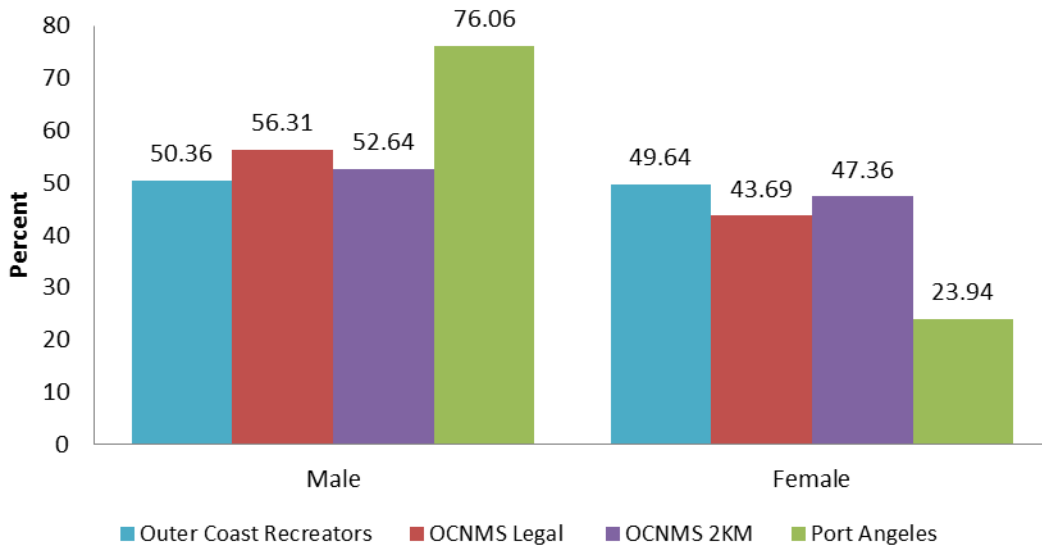
Figure 3.2 Gender: OC, OCNMS-Legal, OCNMS-2km and Port Angeles

Table 3.6 Race: OC, OCNMS-Legal, OCNMS-2km and Port Angeles

Race	Outer Coast Recreators	OCNMS Legal	OCNMS 2KM	Port Angeles
	(%)	(%)	(%)	(%)
White, Non-Hispanic	75.69	73.53	76.43	57.41
Black, Non-Hispanic	1.76	4.28	1.9	-
Other, Non-Hispanic	9.95	14.29	12.76	12.42
Hispanic	9.86	4.97	6.52	27.46
2 or more races, Non-Hispanic	2.74	2.93	2.39	2.72
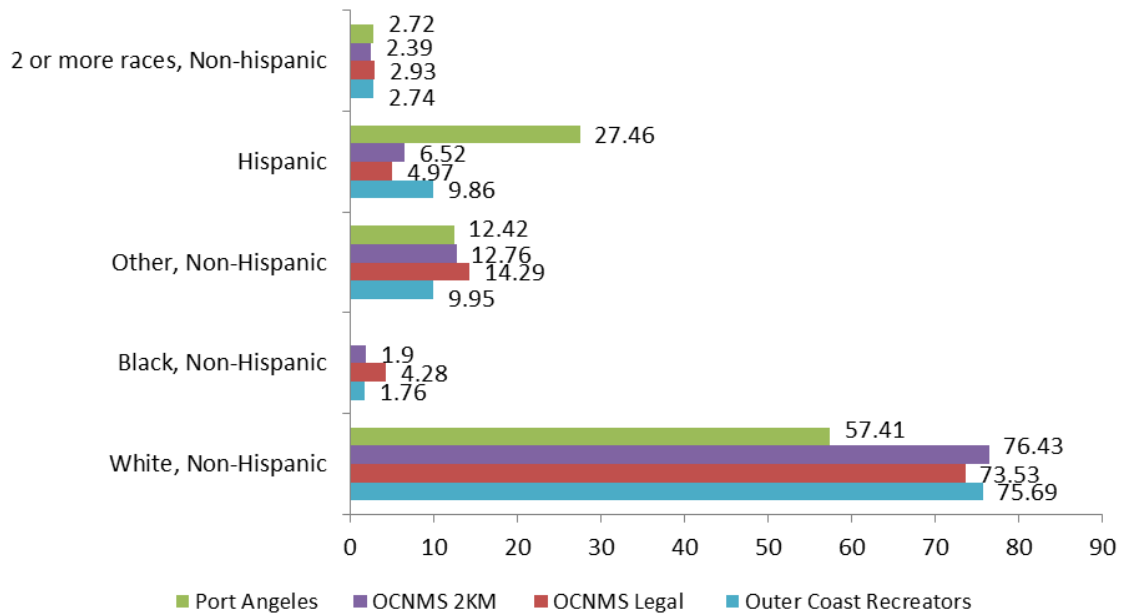
Figure 3.3 Race: OC, OCNMS-Legal, OCNMS-2km and Port Angeles

Table 3.7 Education Level (14 Categories): OC, OCNMS-Legal, OCNMS-2 km, and Port Angeles

Education	Outer Coast Recreators (%)	OCNMS Legal (%)	OCNMS 2KM (%)	Port Angeles (%)
No formal education	0.22	-	-	-
1st, 2nd, 3rd or 4th grade	0.14	-	-	-
5th or 6th grade	0.11	-	-	-
7th or 8th grade	0.28	-	-	-
9th grade	-	-	-	-
10th grade	0.58	-	2.1	-
11th grade	1.00	-	1.1	-
12th grade -no diploma	0.33	-	-	-
High school graduate or GED	27.23	15.87	15.26	22.48
Some college, no degree	25.64	23.74	26.31	19.29
Associate degree	13.02	16.93	13.83	19.34
Bachelor's degree	18.66	23.11	23.6	13.28
Master's degree	9.64	15.43	13.89	19
Professional or Ph.D.	3.16	4.92	3.92	6.62

Table 3.8 Education Level (4 Categories): OC, OCNMS-Legal, OCNMS-2 km, and Port Angeles

Education	Outer Coast Recreators (%)	OCNMS Legal (%)	OCNMS 2KM (%)	Port Angeles (%)
Less than high school	2.66	-	3.19	-
High school or GED	27.23	15.87	15.26	22.48
Some college	38.66	40.66	40.14	39.63
Bachelor's Degree or Higher	31.45	43.66	41.41	38.89
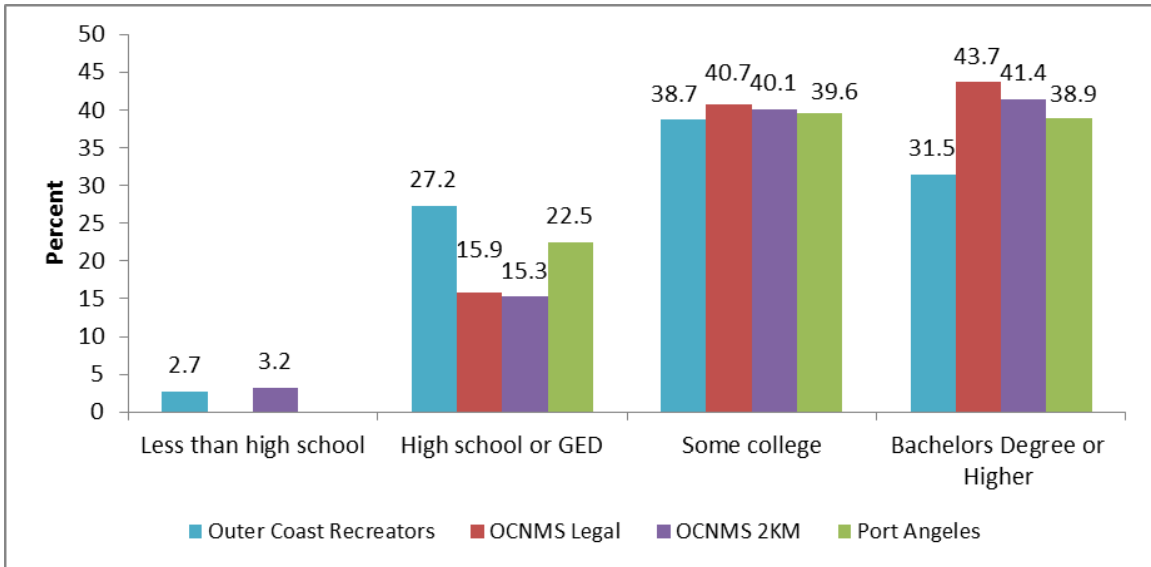
Figure 3.4 Education Level (4 Categories): OC, OCNMS-Legal, OCNMS-2 km, and Port Angeles

Table 3.9 Head of Household: OC, OCNMS-Legal, OCNMS-2 km, and Port Angeles

Household Head	Outer Coast Recreators	OCNMS Legal	OCNMS 2KM	Port Angeles
	(%)	(%)	(%)	(%)
No	15.58	10.50	12.12	23.33
Yes	84.42	89.50	87.88	76.67
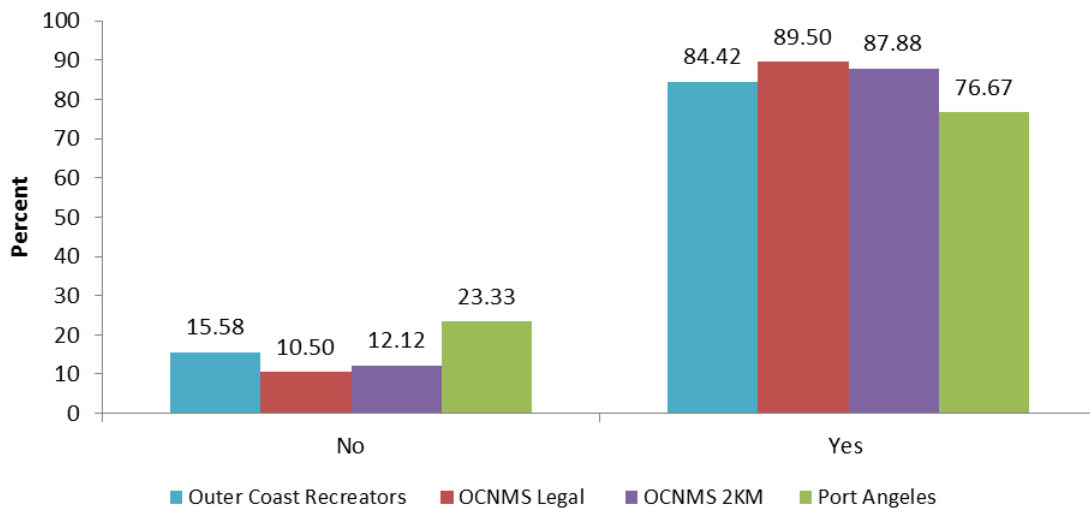
Figure 3.5 Head of Household: OC, OCNMS-Legal, OCNMS-2 km, and Port Angeles

Table 3.10 Household Size: OC, OCNMS-Legal, OCNMS-2 km, and Port Angeles

	Outer Coast	OCNMS Legal	OCNSM 2KM	Port Angeles
Minimum	1	1	1	1
Maximum	15	6	14	6
Mean	2.77	2.82	2.74	2.52
Median	2	3	2	2
Mode	2	2	2	2
Standard Error	0.03	0.13	0.08	2.76
N	2,372	112	364	31
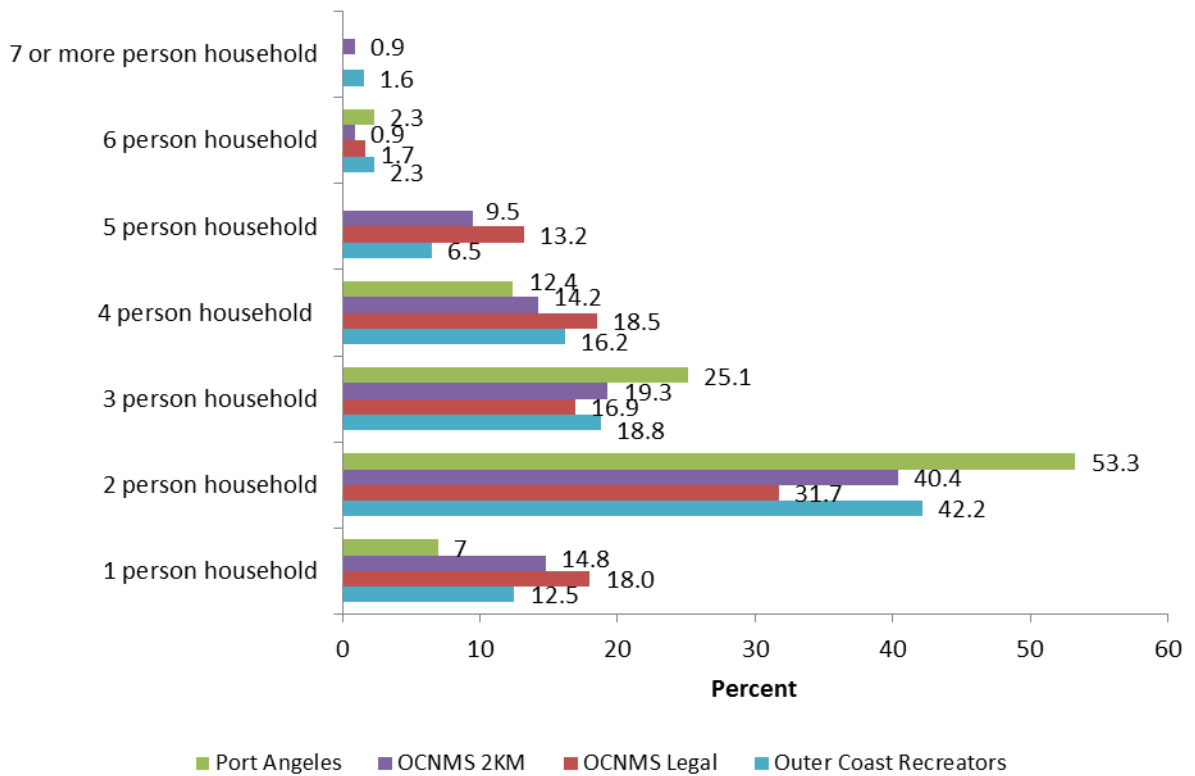
Figure 3.6 Household Size: OC, OCNMS-Legal, OCNMS-2 km, and Port Angeles

Table 3.11 Household Size by Age: OC, OCNMS-Legal, OCNMS-2 km , and Port Angeles

	Minimum	Maximum	Mean	Median	Mode
Outer Coast Recreators					
Children 0-1	0	5	0.07	0	0
Children 2-5	0	5	0.14	0	0
Children 6-12	0	4	0.21	0	0
Children 13-17	0	4	0.18	0	0
Adults 18+	1	6	2.16	2	2
OCNMS Legal					
Children 0-1	0	1	0.06	0	0
Children 2-5	0	2	0.28	0	0
Children 6-12	0	4	0.25	0	0
Children 13-17	0	2	0.19	0	0
Adults 18+	1	6	2.04	2	2
OCNMS 2KM					
Children 0-1	0	1	0.06	0	0
Children 2-5	0	2	0.18	0	0
Children 6-12	0	4	0.23	0	0
Children 13-17	0	4	0.16	0	0
Adults 18+	1	6	2.11	2	2
Port Angeles					
Children 0-1	0	1	0.09	0	0
Children 2-5	0	1	0.07	0	0
Children 6-12	0	2	0.15	0	0
Children 13-17	0	1	0.01	0	0
Adults 18+	1	3	2.19	2	2

Table 3.12 Housing Type: OC, OCNMS-Legal, OCNMS-2 km, and Port Angeles

Housing Type	Outer Coast Recreators (%)	OCNMS Legal (%)	OCNMS 2KM (%)	Port Angeles (%)
One family house- detached	73.49	75.8	73.21	84.23
One family house- attached	5.32	4.98	4.78	4.45
Building with 2 or more apartments	17.05	15.74	16.44	9.61
Mobile Home	3.77	3.48	5.57	1.71
Boat, RV or Van	0.37	-	-	-
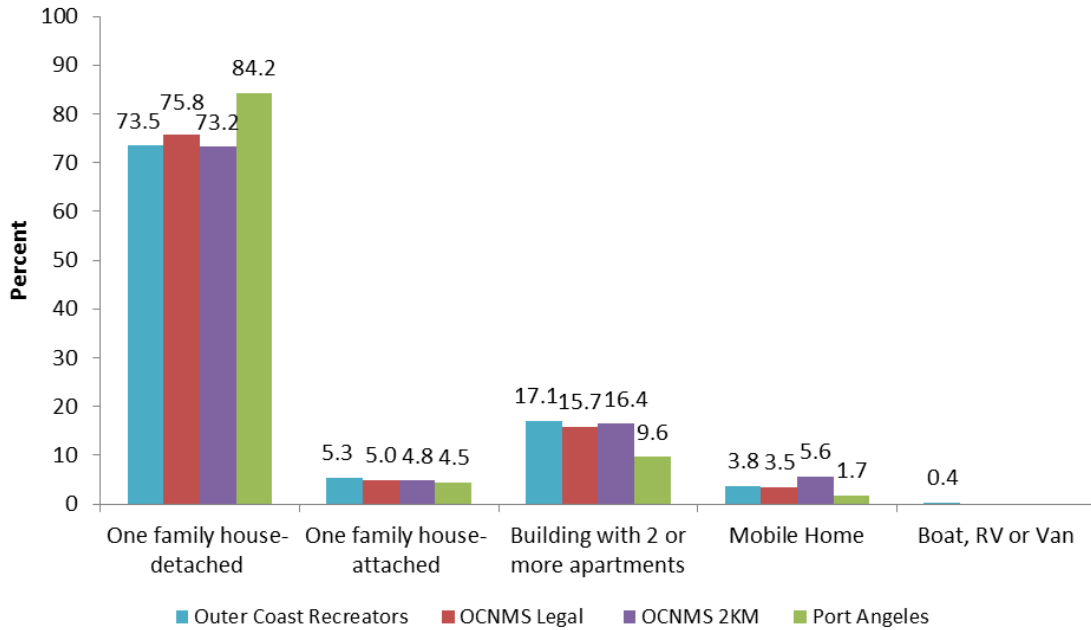
Figure 3.7 Housing Type: OC, OCNMS-Legal, OCNMS-2 km, and Port Angeles

Table 3.13 Ownership of Living Quarters: OC, OCNMS-Legal, OCNMS-2 km, and Port Angeles

Ownership Status	Outer Coast Recreators	OCNMS Legal	OCNMS 2KM	Port Angeles
	(%)	(%)	(%)	(%)
Owned or being bought	69.42	73.61	73.26	77.56
Rented	27.44	25.61	24.54	22.44
Occupied without payment	3.14	0.78	2.20	-
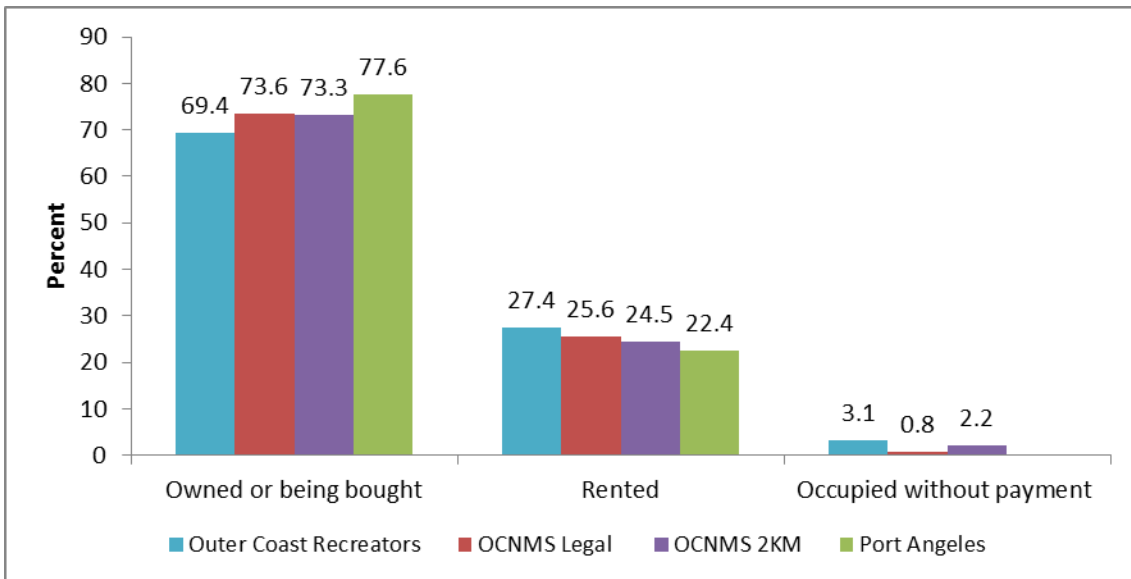
Figure 3.8 Ownership of Living Quarters: OC, OCNMS-Legal, OCNMS-2 km, and Port Angeles

Table 3.14 Marital Status: OC, OCNMS-Legal, OCNMS-2 km, and Port Angeles

Marital Status	Outer Coast Recreators (%)	OCNMS Legal (%)	OCNMS 2KM (%)	Port Angeles (%)
Married	58.15	56.49	63.49	68.81
Widowed	3.03	3.43	2.26	-
Divorced	7.67	3.42	7.91	2.38
Separated	0.86	1.62	1.28	-
Never Married	20.39	25.86	17.16	27.06
Living with a partner	9.90	9.18	7.90	1.75
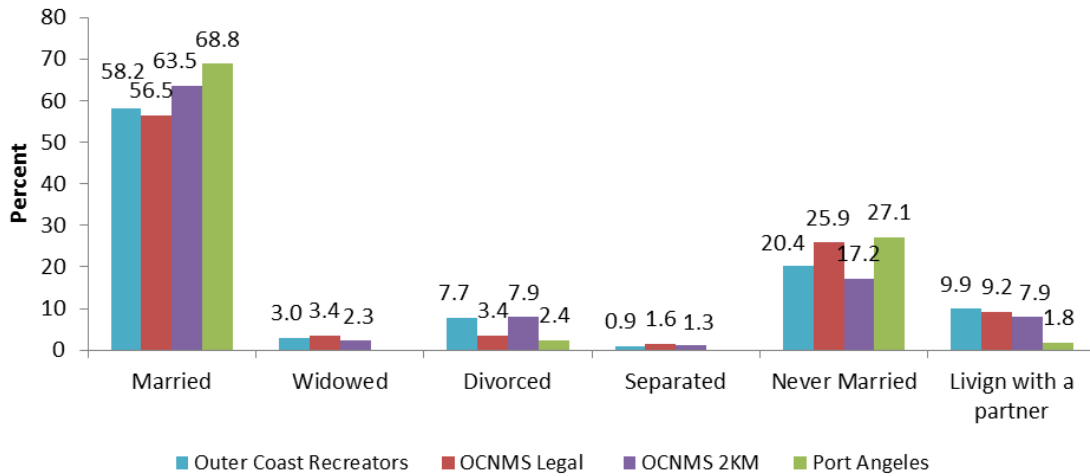
Figure 3.9 Marital Status: OC, OCNMS-Legal, OCNMS-2 km, and Port Angeles

Table 3.15 Current Employment Status: OC, OCNMS-Legal, OCNMS-2 km, and Port Angeles

Employment Status	Outer Coast Recreators (%)	OCNMS Legal (%)	OCNMS 2KM (%)	Port Angeles (%)
Paid Employee	56.24	62.25	59.55	63.16
Self-employed	8.4	4.58	6.62	4.63
Not working- temporary layoff	1.09	0.19	0.26	-
Not working- looking	6.16	3.16	5.58	-
Retired	15.29	17.85	17.09	7.36
Not working- disabled	4.48	5.00	3.07	8.99
Not working- other	8.35	6.98	7.83	15.86
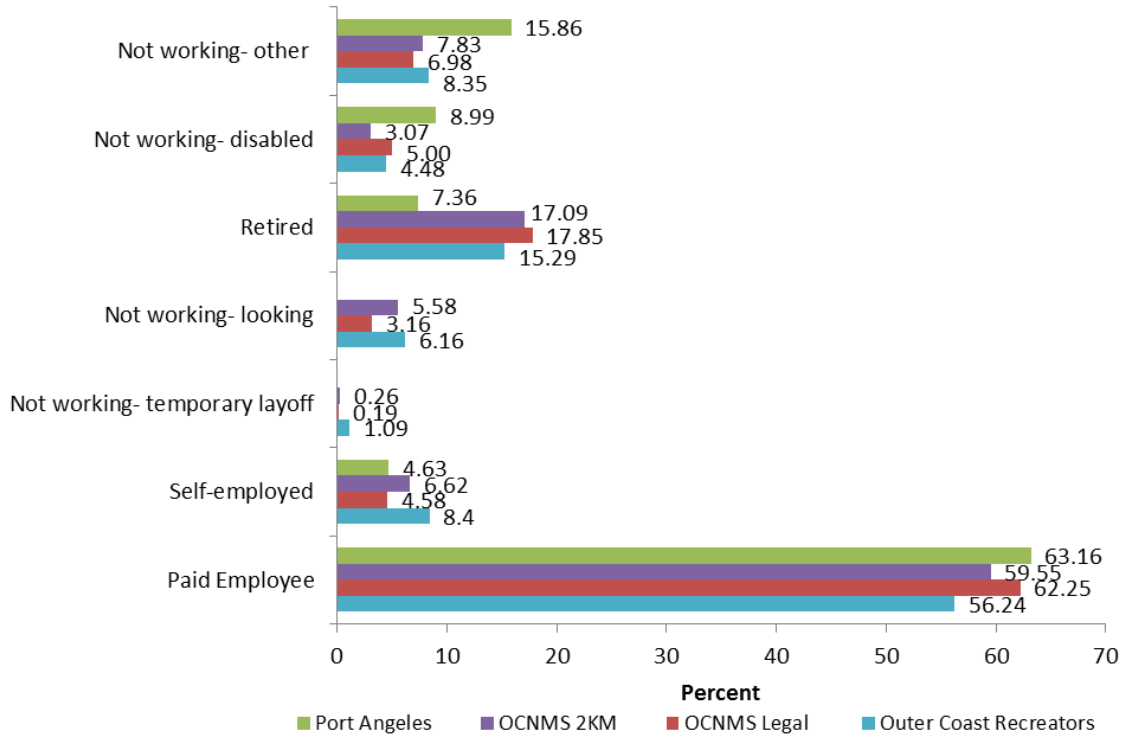
Figure 3.10 Current Employment Status: OC, OCNMS-Legal, OCNMS-2 km, and Port Angeles

Table 3.16 Household Income: OC, OCNMS-Legal, OCNMS-2 km, and Port Angeles

Household Income	Outer Coast Recreators	OCNMS Legal	OCNMS 2KM	Port Angeles
	(%)	(%)	(%)	(%)
Less than $5,000	1.40	0.19	0.76	0.85
$5,000-$7,499	0.63	-	0.69	0.77
$7,500-$9,999	0.92	-	0.73	-
$10,00-$12,499	1.12	0.58	0.28	8.22
$12,500-$14,999	1.43	0.94	1.35	-
$15,000-$19,999	1.72	4.53	2.34	-
$20,000-$24,999	1.67	0.15	0.37	-
$25,000-$29,999	3.31	0.42	1.34	-
$30,000-$34,999	3.08	1.68	2.08	3.71
$35,000-$39,999	5.43	4.45	3.52	-
$40,000-$49,999	7.14	3.45	7.34	-
$50,000-$59,999	10.24	8.96	13.16	9.59
$60,000-$74,999	11.60	12.29	14.46	13.77
$75,000-$84,999	9.74	5.92	6.73	-
$85,000-$99,999	12.28	14.78	10.81	28.58
$100,000-$124,999	14.72	16.96	16.41	6.36
$125,000-$149,999	5.80	9.80	7.15	4.45
$150,000-$174,999	3.64	7.91	4.81	3.44
$175,000 or more	4.10	6.99	5.64	20.26
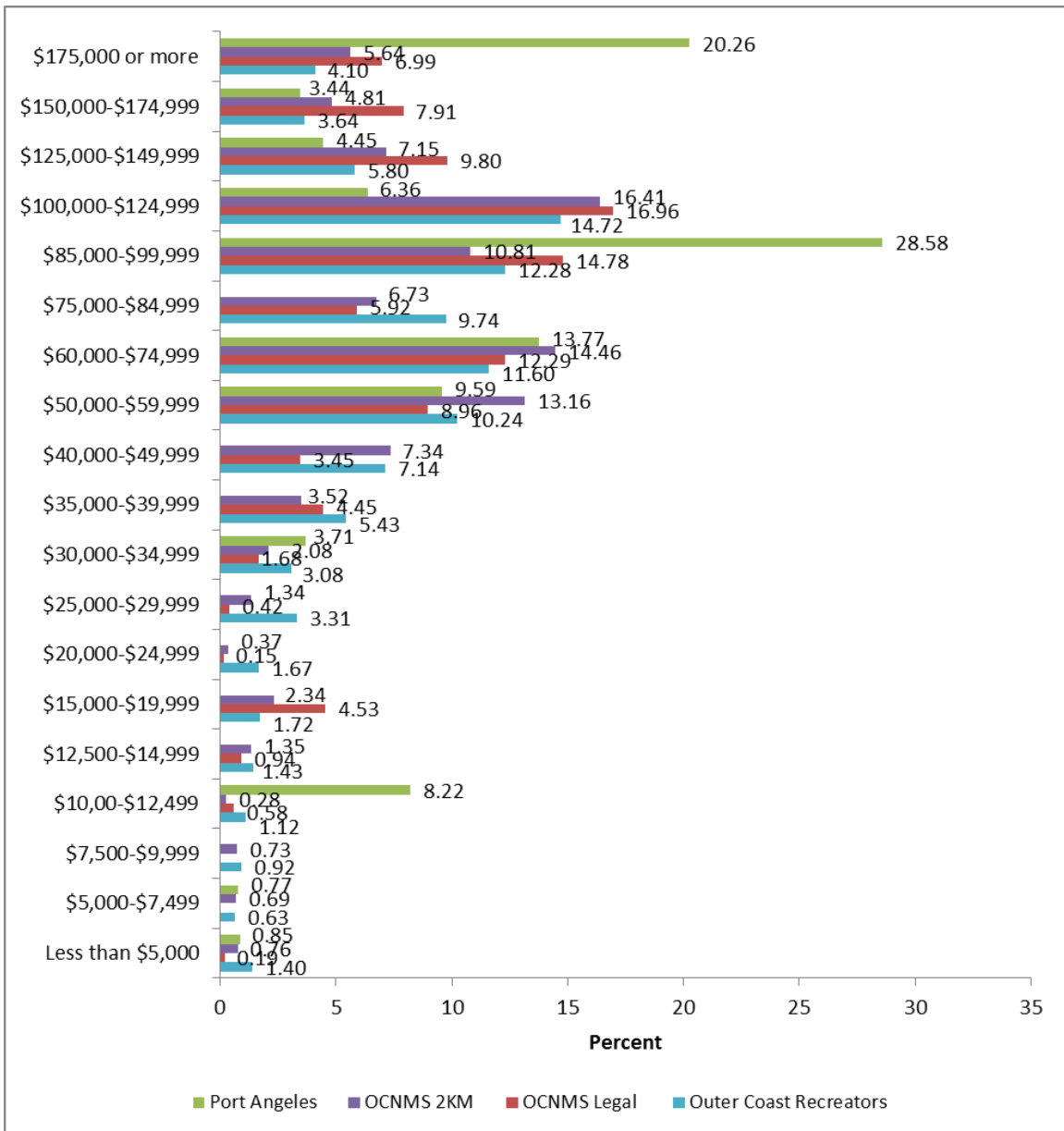
Figure 3.11 Household Income: OC, OCNMS-Legal, OCNMS-2 km, and Port Angeles

Table 3.17 County of Residence: OC, OCNMS-Legal, OCNMS-2 km, and Port Angeles

County	Outer Coast Recreators (%)	OCNMS Legal (%)	OCNMS 2km (%)	Port Angeles (%)
Adams	0.02	-	-	-
Asotin	0.10	-	-	-
Benton	1.42	2.98	1.55	1.74
Chelan	1.07	-	1.23	-
Clallam	3.00	1.75	4.27	-
Clark	7.72	0.88	2.47	2.86
Columbia	0.07	1.62	0.51	-
Cowlitz	2.82	1.12	1.10	-
Douglas	0.49	-	-	-
Ferry	0.06	-	-	-
Franklin	0.34	-	0.76	-
Garfield	-	-	-	-
Grant	0.49	-	0.90	6.10
Grays Harbor	1.87	0.58	0.18	-
Island	0.73	4.06	2.41	-
Jefferson	0.23	-	0.99	-
King	29.46	39.11	31.76	36.21
Kitsap	4.27	5.6	8.00	-
Kittitas	0.54	1.62	1.12	-
Klickitat	0.36	-	0.67	-
Lewis	2.07	-	0.28	-
Lincoln	0.05	-	-	-
Mason	1.06	-	0.15	-
Okanogan	0.20	0.97	0.30	-
Pacific	0.33	-	-	-
Pend Oreille	0.14	-	-	-
Pierce	12.79	11.37	11.54	12.34
San Juan	0.10	-	0.35	-
Skagit	1.73	0.42	1.02	-
Skamania	0.29	-	-	-
Snohomish	9.78	6.3	11.30	8.33
Spokane	3.42	6.97	3.99	17.45
Stevens	0.38	-	1.24	-
Thurston	5.29	10.65	7.38	14.97
Wahkiakum	0.08	-	-	-
Walla Walla	0.84	-	0.68	-
Whatcom	2.28	1.61	2.50	-
Whitman	0.55	-	0.17	-
Yakima	3.56	2.39	1.18	-

Table 3.18 Zip Code of Residence: OC, OCNMS-Legal, OCNMS-2 km, and Port Angeles

Zip Code	Outer Coast Recreators (%)	OCNMS Legal (%)	OCNMS 2KM (%)	Port Angeles (%)
98001	0.66	0.80	0.38	-
98002	0.21	0.47	0.15	-
98003	0.70	0.49	0.28	-
98004	0.32	0.89	0.28	-
98005	0.44	0.29	0.51	-
98006	0.56	0.19	0.50	1.76
98007	0.43	-	0.19	-
98008	0.26	-	0.10	4.45
98010	0.05	-	0.20	-
98011	0.25	-	0.21	-
98012	1.34	-	0.40	2.85
98013	0.07	-	-	-
98014	0.38	-	0.06	-
98019	0.11	1.71	0.78	-
98020	0.38	-	0.83	3.88
98021	0.43	-	0.97	-
98022	0.33	-	-	-
98023	0.90	1.00	0.90	3.92
98024	0.19	-	-	-
98025	0.08	-	-	-
98026	0.43	2.40	0.89	-
98027	0.72	-	-	-
98028	0.36	0.71	0.22	-
98029	0.30	-	-	-
98030	0.32	-	-	-
98031	0.64	-	-	-
98032	0.47	0.57	0.18	-
98033	0.10	-	0.33	-
98034	0.41	-	0.09	-
98036	0.31	0.19	0.29	-
98037	0.46	-	0.60	-
98038	0.34	-	-	-
98040	0.24	0.46	0.76	-
98042	1.05	2.45	1.60	-
98043	0.41	1.45	0.61	-
98045	0.04	-	-	-
98046	0.14	-	-	-
98047	0.08	-	-	-
98051	0.08	-	-	-
98052	0.88	2.27	1.36	-

Table 3.18 Zip Code of Residence: OC, OCNMS-Legal, OCNMS-2 km, and Port Angeles (continued)

Zip Code	Outer Coast Recreators (%)	OCNMS Legal (%)	OCNMS 2KM (%)	Port Angeles (%)
98053	0.61	-	0.25	15.66
98055	0.25	-	-	-
98056	0.92	-	-	-
98057	0.07	-	-	-
98058	1.03	7.37	2.43	-
98059	0.50	-	0.36	-
98065	0.17	1.03	0.57	-
98070	0.20	-	-	-
98072	0.33	0.23	0.62	-
98074	0.15	0.60	0.61	-
98077	0.11	-	0.13	-
98083	0.06	-	0.32	-
98087	0.22	-	0.32	-
98092	0.49	-	0.26	-
98101	0.51	0.56	0.28	-
98102	0.79	0.73	0.23	2.45
98103	0.66	0.90	1.39	-
98104	0.28	-	-	0.97
98105	0.52	0.26	0.28	-
98106	0.51	2.97	1.35	-
98107	0.19	-	1.16	-
98108	0.24	-	0.45	-
98109	0.55	-	1.02	-
98110	0.50	1.18	2.78	-
98111	0.04	-	-	-
98112	0.30	1.99	1.74	-
98115	0.57	0.88	1.08	-
98116	0.34	-	0.11	0.95
98117	0.37	0.88	0.27	0.80
98118	0.62	0.20	0.06	-
98119	0.26	0.76	1.06	-
98121	0.42	1.11	1.19	-
98122	0.48	-	-	0.97
98125	0.33	-	0.49	-
98126	0.26	-	0.13	1.02
98133	0.81	0.72	1.10	-
98136	0.15	-	-	-
98144	0.34	-	-	-
98146	0.31	-	-	0.97

Table 3.18 Zip Code of Residence: OC, OCNMS-Legal, OCNMS-2 km, and Port Angeles (continued)

Zip Code	Outer Coast Recreators (%)	OCNMS Legal (%)	OCNMS 2KM (%)	Port Angeles (%)
98155	0.21	-	0.60	-
98165	0.01	-	-	-
98166	0.20	-	-	-
98168	0.47	-	-	-
98177	0.39	-	0.15	2.29
98178	0.36	-	0.98	-
98188	0.27	1.67	0.52	-
98195	0.03	-	-	-
98198	0.40	1.78	0.66	-
98199	0.40	2.18	0.82	-
98201	0.21	-	0.19	-
98203	0.47	0.46	0.14	-
98204	0.40	-	0.20	-
98208	1.04	0.79	2.62	-
98221	0.23	0.42	0.13	-
98223	0.55	-	0.73	0.86
98225	0.75	0.23	0.11	-
98226	0.65	-	0.63	-
98227	0.01	-	-	-
98229	0.39	1.38	1.07	-
98230	0.17	-	0.39	-
98231	0.03	-	-	-
98232	0.03	-	-	-
98233	0.22	-	-	-
98235	0.19	-	-	-
98236	0.14	-	-	-
98239	0.01	-	-	-
98241	0.02	-	0.17	-
98245	0.03	-	-	-
98247	0.07	-	-	-
98248	0.08	-	-	-
98249	0.01	-	-	-
98250	0.07	-	0.35	-
98251	0.08	-	-	-
98252	0.29	-	-	-
98253	0.01	-	-	-
98257	0.07	-	0.50	-
98155	0.21	-	0.60	-
98165	0.01	-	-	-

Table 3.18 Zip Code of Residence: OC, OCNMS-Legal, OCNMS-2 km, and Port Angeles (continued)

Zip Code	Outer Coast Recreators (%)	OCNMS Legal (%)	OCNMS 2KM (%)	Port Angeles (%)
98258	0.40	-	0.51	-
98260	0.19	1.49	0.46	-
98264	0.09	-	-	-
98266	0.01	-	0.09	-
98270	0.43	0.64	0.39	-
98271	0.41	-	-	-
98272	0.48	-	0.79	-
98273	0.69	-	0.39	-
98274	0.07	-	-	-
98275	0.16	-	0.28	-
98277	0.14	-	0.38	-
98282	0.24	2.57	1.56	-
98284	0.22	-	-	-
98290	0.33	-	0.11	0.74
98292	0.18	-	0.12	-
98294	0.10	0.17	0.05	-
98295	0.03	-	0.21	-
98296	0.09	0.22	0.07	-
98310	0.29	-	0.24	-
98311	0.29	1.54	0.48	-
98312	0.50	1.69	0.83	-
98315	0.01	-	-	-
98321	0.20	0.70	0.22	-
98326	0.30	-	-	-
98327	0.15	-	-	-
98328	0.15	-	-	-
98329	0.04	-	0.04	-
98331	0.33	-	2.18	-
98332	0.18	-	-	-
98333	0.03	-	-	-
98335	0.60	0.24	0.17	-
98336	0.08	-	-	-
98337	0.24	-	-	-
98338	0.46	-	-	0.85
98339	0.02	-	0.14	-
98344	0.04	-	0.30	-
98345	0.04	-	-	-
98346	0.06	-	0.13	-
98258	0.40	-	0.51	-

Table 3.18 Zip Code of Residence: OC, OCNMS-Legal, OCNMS-2 km, and Port Angeles (continued)

Zip Code	Outer Coast Recreators (%)	OCNMS Legal (%)	OCNMS 2KM (%)	Port Angeles (%)
98349	0.11	-	0.20	-
98354	0.06	-	-	-
98356	0.04	-	-	-
98359	0.03	-	0.23	-
98360	0.18	-	-	-
98362	0.76	-	-	-
98363	0.34	-	0.55	-
98365	0.10	-	0.24	-
98366	1.01	0.70	0.89	-
98367	0.39	-	0.23	-
98368	0.11	-	0.62	-
98370	0.35	0.49	0.52	-
98371	0.65	-	-	-
98372	0.33	-	-	1.60
98373	0.35	-	0.05	-
98374	0.51	0.84	0.76	-
98375	0.23	-	0.10	-
98380	0.05	-	-	-
98382	1.27	1.75	1.54	-
98383	0.51	-	1.66	-
98387	0.19	-	0.74	-
98388	0.16	0.30	0.09	-
98390	0.32	-	0.15	-
98391	1.15	0.93	0.68	-
98397	0.02	-	-	-
98401	0.02	0.42	0.13	-
98402	0.26	0.83	0.26	-
98403	0.10	-	0.16	-
98404	0.20	-	-	-
98405	0.41	-	0.19	0.77
98406	0.25	-	0.11	-
98407	0.39	-	-	-
98408	0.16	-	-	-
98409	0.46	-	0.02	-
98411	0.02	-	-	-
98418	0.09	-	-	-
98422	0.25	-	-	-
98424	0.02	-	-	-
98349	0.11	-	0.20	-

Table 3.18 Zip Code of Residence: OC, OCNMS-Legal, OCNMS-2 km, and Port Angeles (continued)

Zip Code	Outer Coast Recreators (%)	OCNMS Legal (%)	OCNMS 2KM (%)	Port Angeles (%)
98433	0.10	-	-	-
98443	0.03	-	-	-
98444	0.78	5.92	2.17	-
98445	0.89	-	1.29	-
98446	0.23	-	-	-
98447	0.02	-	-	-
98465	0.15	-	-	-
98466	0.30	0.29	0.33	-
98467	0.12	0.90	0.28	-
98498	0.74	-	1.87	9.12
98499	0.53	-	1.04	-
98501	0.91	1.47	1.30	-
98502	0.90	1.12	0.90	2.47
98503	0.62	0.57	0.76	-
98504	0.03	-	-	-
98505	0.24	5.50	1.72	-
98506	0.30	0.78	0.72	-
98507	0.07	-	-	-
98509	0.17	-	-	-
98512	0.42	-	0.52	-
98513	0.71	0.28	0.30	12.50
98516	0.37	0.91	0.71	-
98520	0.46	-	-	-
98524	0.10	-	0.15	-
98528	0.17	-	-	-
98531	0.35	-	-	-
98532	1.30	-	-	-
98537	0.23	-	-	-
98541	0.24	-	-	-
98546	0.08	-	-	-
98547	0.06	-	-	-
98548	0.01	-	-	-
98550	0.16	0.58	0.18	-
98558	0.00	-	-	-
98563	0.48	-	-	-
98564	0.02	-	-	-
98565	0.18	-	-	-
98569	0.19	-	-	-
98433	0.10	-	-	-

Table 3.18 Zip Code of Residence: OC, OCNMS-Legal, OCNMS-2 km, and Port Angeles (continued)

Zip Code	Outer Coast Recreators (%)	OCNMS Legal (%)	OCNMS 2KM (%)	Port Angeles (%)
98570	0.04	-	0.28	-
98576	0.03	-	-	-
98579	0.13	-	-	-
98580	0.15	-	0.19	-
98582	0.00	-	-	-
98584	0.70	-	-	-
98586	0.04	-	-	-
98589	0.14	-	0.36	-
98595	0.07	-	-	-
98596	0.06	-	-	-
98597	0.25	-	0.09	-
98601	0.27	-	-	-
98604	0.85	-	0.36	-
98606	0.07	-	-	-
98607	0.40	0.65	0.20	-
98610	0.06	-	-	-
98611	0.03	-	-	-
98612	0.08	-	-	-
98614	0.06	-	-	-
98617	0.04	-	-	-
98620	0.16	-	0.67	-
98624	0.06	-	-	-
98625	0.19	-	0.30	-
98626	0.56	-	-	-
98628	0.01	-	-	-
98629	0.06	-	-	-
98631	0.14	-	-	-
98632	2.00	1.12	0.80	-
98635	0.11	-	-	-
98638	0.05	-	-	-
98639	0.07	-	-	-
98642	0.24	-	0.06	-
98645	0.04	-	-	-
98648	0.16	-	-	-
98660	0.13	-	-	2.86
98661	0.78	-	-	-
98662	0.50	-	0.69	-
98663	0.11	-	-	-
98570	0.04	-	0.28	-

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Table 3.18 Zip Code of Residence: OC, OCNMS-Legal, OCNMS-2 km, and Port Angeles (continued)

Zip Code	Outer Coast Recreators (%)	OCNMS Legal (%)	OCNMS 2KM (%)	Port Angeles (%)
98664	0.41	-	-	-
98665	0.46	-	-	-
98666	0.03	-	-	-
98671	0.37	0.23	0.07	-
98672	0.02	-	-	-
98673	0.01	-	-	-
98674	0.01	-	-	-
98675	0.17	-	0.45	-
98682	0.89	-	0.08	-
98683	0.80	-	0.16	-
98684	0.51	-	0.22	-
98685	0.35	-	-	-
98686	0.33	-	0.18	-
98801	0.40	-	-	-
98802	0.49	-	-	-
98807	0.08	-	-	-
98813	0.05	-	-	-
98815	0.21	-	1.23	-
98822	0.21	-	-	-
98823	0.17	-	0.90	-
98828	0.17	-	-	-
98837	0.19	-	-	-
98844	0.11	-	-	-
98848	0.09	-	-	6.10
98901	0.10	-	-	-
98902	0.73	1.22	0.38	-
98903	0.03	-	-	-
98908	0.69	1.16	0.58	-
98922	0.20	-	0.61	-
98925	0.20	-	-	-
98926	0.15	1.62	0.51	-
98930	0.08	-	-	-
98936	0.23	-	-	-
98937	0.03	-	0.21	-
98942	0.74	-	-	-
98944	0.49	-	-	-
98947	0.04	-	-	-
98948	0.15	-	-	-
98664	0.41	-	-	-

Table 3.18 Zip Code of Residence: OC, OCNMS-Legal, OCNMS-2 km, and Port Angeles (continued)

Zip Code	Outer Coast Recreators (%)	OCNMS Legal (%)	OCNMS 2KM (%)	Port Angeles (%)
98951	0.22	-	-	-
98952	0.04	-	-	-
99001	0.25	5.64	1.76	-
99003	0.08	-	-	-
99004	0.08	-	-	-
99005	0.07	-	0.10	-
99016	0.12	0.38	0.45	-
99021	0.13	-	0.33	-
99022	0.16	-	-	-
99025	0.03	-	-	-
99026	0.10	-	-	-
99029	0.05	-	-	-
99037	0.09	-	-	2.17
99111	0.10	-	-	-
99114	0.20	-	0.99	-
99116	0.04	0.97	0.30	-
99123	0.04	-	-	-
99130	0.04	-	-	-
99137	0.04	-	-	-
99148	0.04	-	0.25	-
99156	0.14	-	-	-
99163	0.42	-	0.17	-
99166	0.06	-	-	-
99201	0.03	-	-	-
99202	0.08	-	-	-
99203	0.04	-	0.07	-
99205	0.22	-	-	-
99206	0.23	0.38	0.28	-
99207	0.22	-	0.25	8.22
99208	0.53	0.58	0.18	7.06
99209	0.01	-	-	-
99212	0.05	-	0.28	-
99216	0.31	-	-	-
99217	0.03	-	-	-
99218	0.19	-	-	-
99223	0.19	-	0.28	-
99224	0.05	-	-	-
99251	0.24	-	-	-
98951	0.22	-	-	-

Table 3.18 Zip Code of Residence: OC, OCNMS-Legal, OCNMS-2 km, and Port Angeles (continued)

Zip Code	Outer Coast Recreators (%)	OCNMS Legal (%)	OCNMS 2KM (%)	Port Angeles (%)
99301	0.34	-	0.76	-
99320	0.05	-	-	-
99324	0.01	-	-	-
99328	0.07	1.62	0.51	-
99329	0.10	-	0.68	-
99336	0.27	-	0.61	-
99337	0.38	2.98	0.93	-
99338	0.05	-	-	-
99344	0.02	-	-	-
99350	0.02	-	-	-
99352	0.26	-	-	-
99353	0.29	-	-	-
99354	0.11	-	-	1.74
99361	0.06	-	-	-
99362	0.67	-	-	-
99403	0.10	-	-	-

Table 3.19 Metropolitan Statistical Area Status: OC, OCNMS-Legal, OCNMS-2 km, and Port Angeles

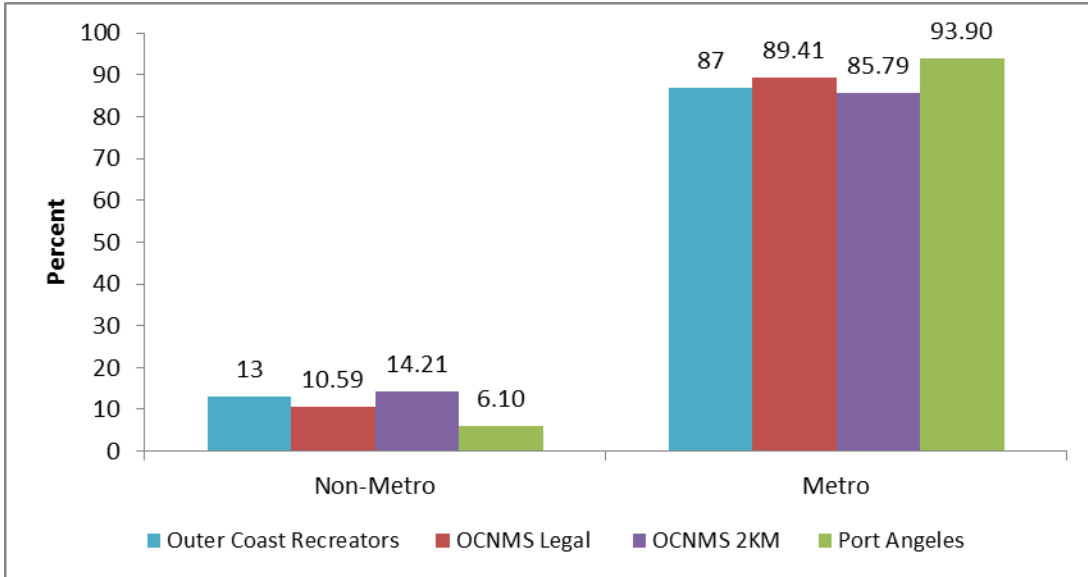| MSA Status	Outer Coast Recreators (%)	OCNMS Legal (%)	OCNMS 2KM (%)	Port Angeles (%)
Non-Metro	13	10.59	14.21	6.10
Metro	87	89.41	85.79	93.90

Figure 3.12 Metropolitan Statistical Area Status: OC, OCNMS-Legal, OCNMS-2 km, and Port Angeles

4. Expenditures

As with demographics, results are presented for the four jurisdictions/sub-areas. A different approach was used for the OC versus the other jurisdiction or sub-areas due to sample sizes. For the OC, separate expenditures estimates were made for residents and non-residents of the economic impact study area for the OC. This follows the traditional distinction in economic impact analyses that treats resident and non-resident spending differently to avoid double-counting economic impacts from different "basic" or "export" industries in a given economy. However, an alternative approach counts impacts the same using the "import substitution" assumption (i.e., that if some action occurs that displaces recreation activity, people will go elsewhere and the total losses, including multiplier impacts from resident spending could also be lost).

In regional economic impact analyses, it is usually assumed that if people do not spend their money on one thing in the region they will simply spend it on something else. So if residents do not spend their money locally for recreation, they will simply spend it on something else in the region and the net loses will be zero. However, residents may leave the region to do their recreation in another region and the economic impact of their spending would be shifted from one region to another with on region losing and another gaining. However, those loses may be important to the region facing loses. For the entire OC, the breakdown was provided so future applications could distinguish between residents and non-residents when assessing changes where the assumption of import substitution is not relevant. Again, for the other jurisdiction or sub-areas, sample sizes would not support estimation separately of resident and non-resident spending estimates.

Outer Coast

Estimates were made separately for residents and non-residents of the study area for where the economic impacts of spending take place. The economic impact was divided by areas into primary counties where the activity takes place and secondary counties where a large portion of the multiplier impacts of the spending take place. The objective was to keep the estimated impacts to as small a local area as possible without losing large leakages via the multiplier process. Primary counties are the counties along the coast where most of the direct spending occurs. The secondary counties are the counties where at least 5,000 employees in a primary county live in a secondary county. Secondary counties are included in the analysis to account for indirect and induced impacts. The source of the data to identify secondary counties was the Census of Intercounty Commuters (U.S. Department of Commerce, Bureau of the Census). Table 4.1 has the counties in each jurisdiction or sub-area that define the study area where the economic impact analysis was estimated.

Table 4.1 Primary and Secondary Counties for Economic Impact Analyses

					Counties			
Jurisdiction or sub-area	Clallam	Grays Harbor	Jefferson	King	Kitsap	Mason	Pierce	Thurston
Outer Coast	Primary	Primary	Primary	Secondary	Secondary	Secondary	Secondary	Secondary
OCNMS Legal	Primary	Primary	Primary	Secondary	Secondary	Secondary	Secondary	Secondary
OCNMS 2KM Buffer	Primary	Primary	Primary	Secondary	Secondary	Secondary	Secondary	Secondary
Port Angeles	Primary	N/A	Secondary	Secondary	N/A	N/A	Secondary	N/A

Expenditures and the number of people covered by expenditures were obtained in the survey for the household traveling group by expenditure category (See Appendix A for the questionnaire). Additionally, outliers were screened on a per person-day expenditure basis.

Expenditures were estimated per household group per trip for residents and non-residents separately. For residents, the weighted sample estimates by expenditure category per household group per trip (column 1, Table 4.2) were multiplied by the estimated number of annual household trips to the OC for recreation over the past 12 months (column 2, Table 4.2) which yields an estimate of total annual expenditures (column 3, Table 4.2). For residents, total spending per household group per trip was estimated at $136.18 and total annual expenditures at $31,644,878. Expenditures per person-trip and per person-day were then derived by dividing by total estimated person-trips made by residents (651,069) and by person-days for residents (1,398,813). This yielded estimates of total spending per person-trip of $48.41 and per person-day of $22.53. These latter estimates could be used in benefits transfer applications where either person-trips or person-days affected by a policy/management action.

Table 4.2 Estimates of Resident Expenditures for the OC

Category	Household Group spending/trip	Number of Households Trips	Total Spending	Spending Per Person-trip	Spending Per Person-day
Other	$0.82	232,381	$191,296	$0.29	$0.14
Parking	$0.37	232,381	$84,866	$0.13	$0.06
Car Fuel	$28.28	232,381	$6,570,805	$10.09	$4.70
Airline Flight	$0.00	232,381	$0	$0.00	$0.00
Bus/Ferry/Train Ticket	$0.01	232,381	$3,184	$0.00	$0.00
Food and Beverages from a Store	$20.82	232,381	$4,839,009	$7.43	$3.46
Food and Beverages at a Restaurant or Bar	$37.57	232,381	$8,729,648	$13.41	$6.24
Shopping and Souvenirs	$8.76	232,381	$2,036,355	$3.13	$1.46
Sundries	$2.57	232,381	$597,057	$0.92	$0.43
Car Rental	$0.00	232,381	$0	$0.00	$0.00
Dive Equipment Rental and Airfills	$0.00	232,381	$0	$0.00	$0.00
Equipment Rental	$0.00	232,381	$0	$0.00	$0.00
Lodging/Campsite Fee	$33.78	232,381	$7,849,156	$12.06	$5.61
Charter Fee	$0.18	232,381	$42,386	$0.07	$0.03
Park Entrance, Museum, Aquarium, or Other Entrance Fee	$1.20	232,381	$279,973	$0.43	$0.20
Lessons, Clinics, Camps	$0.00	232,381	$0	$0.00	$0.00
One-day Fishing License Fee	$0.30	232,381	$69,714	$0.11	$0.05
Bait and Tackle	$0.31	232,381	$72,433	$0.11	$0.05
Boat Fuel	$0.61	232,381	$141,171	$0.22	$0.10
Boat Rental	$0.00	232,381	$0	$0.00	$0.00
Boat Ramp Fees	$0.04	232,381	$9,621	$0.01	$0.01
Casino	$0.55	232,381	$128,205	$0.20	$0.09
Total	$135.63	232,381	$31,516,673	$48.41	$22.53

For non-residents, the same method of estimation was performed. For non-residents total spending per household group per trip was estimated at $314.95 and total annual expenditures at $520,042,803. Expenditures per person-trip and per person-day were then derived by dividing by total estimated person-trips made by residents (4,557,483) and by person-days for residents (11,723,257). This yielded estimates of total spending per person-trip of $114.11 and per person-day of $44.36. These latter estimates could be used in benefits transfer applications where either person-trips or person-days affected by a policy/management action.

Table 4.3 Estimates for Non-Resident Expenditures for the Outer Coast

Category	Household Group spending/trip	Number of Households Trips	Total Spending	Spending Per Person-trip	Spending Per Person-day
Other	$0.42	1,650,772	$685,688	$0.15	$0.06
Parking	$2.69	1,650,772	$4,437,903	$0.97	$0.38
Car Fuel	$61.36	1,650,772	$101,294,686	$22.23	$8.64
Airline Flight	$3.18	1,650,772	$5,256,633	$1.15	$0.45
Bus/Ferry/Train Ticket	$4.00	1,650,772	$6,598,774	$1.45	$0.56
Food and Beverages from a Store	$42.76	1,650,772	$70,594,823	$15.49	$6.02
Food and Beverages at a Restaurant or Bar	$64.95	1,650,772	$107,220,219	$23.53	$9.15
Shopping and Souvenirs	$25.28	1,650,772	$41,732,262	$9.16	$3.56
Sundries	$4.13	1,650,772	$6,815,410	$1.50	$0.58
Car Rental	$2.84	1,650,772	$4,695,077	$1.03	$0.40
Dive Equipment Rental and Airfills	$1.02	1,650,772	$1,692,013	$0.37	$0.14
Equipment Rental	$2.41	1,650,772	$3,983,245	$0.87	$0.34
Lodging/Campsite Fee	$80.02	1,650,772	$132,098,669	$28.99	$11.27
Charter Fee	$6.89	1,650,772	$11,377,053	$2.50	$0.97
Park Entrance, Museum, Aquarium, or Other Entrance Fee	$4.47	1,650,772	$7,371,089	$1.62	$0.63
Lessons, Clinics, Camps	$0.50	1,650,772	$819,925	$0.18	$0.07
One-day Fishing License Fee	$1.06	1,650,772	$1,752,236	$0.38	$0.15
Bait and Tackle	$1.39	1,650,772	$2,286,781	$0.50	$0.20
Boat Fuel	$2.23	1,650,772	$3,680,499	$0.81	$0.31
Boat Rental	$2.56	1,650,772	$4,226,172	$0.93	$0.36
Boat Ramp Fees	$0.37	1,650,772	$604,852	$0.13	$0.05
Casino	$0.42	1,650,772	$690,590	$0.15	$0.06
Total	$314.95	1,650,772	$520,042,803	$114.11	$44.36

Adding up resident and non-resident annual expenditures yields an estimate of total annual spending for recreation in the OC. Total annual expenditures by all recreators in the OC was estimated at $551,559,477. Dividing these expenditures by the total annual person-trips yields a weighted average spending per person-trip of $105.89. Dividing the estimate of annual total expenditures by total annual person-days yields an estimate of the weighted average spending per person-day of $42.03. Again, these estimates could be used in a benefits transfer (Table 4.4).

Table 4.4 Total Spending All Recreators in the Outer Coast

	Total Spending	Spending Per Person-trip	Spending Per Person-day
Other	$876,984	$0.17	$0.07
Parking	$4,522,768	$0.87	$0.34
Car Fuel	$107,865,491	$20.71	$8.22
Airline Flight	$5,256,633	$1.01	$0.40
Bus/Ferry/Train Ticket	$6,601,957	$1.27	$0.50
Food and Beverages from a Store	$75,433,832	$14.48	$5.75
Food and Beverages at a Restaurant or Bar	$115,949,867	$22.26	$8.84
Shopping and Souvenirs	$43,768,616	$8.40	$3.34
Sundries	$7,412,466	$1.42	$0.56
Car Rental	$4,695,077	$0.90	$0.36
Dive Equipment Rental and Airfills	$1,692,013	$0.32	$0.13
Equipment Rental	$3,983,245	$0.76	$0.30
Lodging/Campsite Fee	$139,947,826	$26.87	$10.67
Charter Fee	$11,419,439	$2.19	$0.87
Park Entrance, Museum, Aquarium, or Other Entrance Fee	$7,651,062	$1.47	$0.58
Lessons, Clinics, Camps	$819,925	$0.16	$0.06
One-day Fishing License Fee	$1,821,950	$0.35	$0.14
Bait and Tackle	$2,359,214	$0.45	$0.18
Boat Fuel	$3,821,670	$0.73	$0.29
Boat Rental	$4,226,172	$0.81	$0.32
Boat Ramp Fees	$614,473	$0.12	$0.05
Casino	$818,795	$0.16	$0.06
Total	$551,559,477	$105.89	$42.03

OCNMS-Legal, OCNMS-2 km and Port Angeles (PA)

Due to limited sample sizes, a different approach was used to estimate expenditures for the OCNMS-Legal, OCNMS-2 km and Port Angeles (PA) jurisdiction or sub-areas. The approach used here estimated the expenditures per person-trip by taking the expenditures per household group per trip and dividing by the number of people the expenditures covered for each type of expenditure. The estimates are weighted sample average for residents and non-residents. Tables 4.5 – 4.7 show the sample statistics expenditures per household group per trip. Tables 4.8 – 4.10 show the sample statistics for expenditures per person-trip.

Table 4.5 Average Expenditures Per Household Group Per Trip for OCNMS – Legal Definition

Expenditure Category	Mean	Standard Error	Minimum	Maximum	N
Parking	2.33	0.86	0	110	111
Car fuel	51.92	5.90	0	450	109
Airline Flight	0.00	0.00	0	0	111
Bus/Ferry/Train	5.96	2.12	0	190	110
Car rental	0.87	0.59	0	45	112
Lodging/Campsite fee	159.10	36.85	0	3,500	112
Food & Beverages from a store	41.83	6.65	0	600	112
Food & Beverages from a restaurant or Bar	64.18	7.20	0	400	112
Shopping and Souvenirs	24.37	4.78	0	300	112
Sundries	6.28	1.69	0	190	112
Dive equipment rental and air fills	2.88	3.59	0	500	112
Other Equipment rental	1.96	1.55	0	220	112
Boat rentals	5.59	4.33	0	550	112
Charter fees	5.12	3.52	0	350	112
Entrance fees	3.96	1.80	0	220	112
One-day fishing license fee	1.69	`1.04	0	100	110
Boat ramp fees	0.42	0.58	0	100	112
Bait & tackle	0.51	0.30	0	50	112
Boat fuel	2.33	1.67	0	250	112
Lessons, Clinics, Camps	0.00	0.00	0	0	112
Other	0.00	0.00	0	0	112

Table 4.6 Average Expenditures Per Household Group Per Trip for OCNMS 2km Buffer Definition

Expenditure Category	Mean	Standard Error	Minimum	Maximum	N
Parking	2.54	0.40	0	110	363
Car fuel	57.47	3.70	0	500	360
Airline Flight	1.04	0.85	0	300	363
Bus/Ferry/Train	5.25	1.03	0	200	362
Car rental	2.51	0.82	0	200	363
Lodging/Campsite fee	154.49	24.94	0	5,400	364
Food & Beverages from a store	41.63	3.15	0	600	363
Food & Beverages from a restaurant or Bar	57.80	3.69	0	400	362
Shopping and Souvenirs	22.14	3.18	0	500	364
Sundries	7.32	1.70	0	550	364
Dive equipment rental and air fills	2.70	1.49	0	500	363
Other Equipment rental	1.69	0.85	0	300	364
Boat rentals	4.72	1.84	0	550	363
Charter fees	4.14	1.85	0	900	364
Entrance fees	3.63	0.70	0	220	364
One-day fishing license fee	0.77	0.35	0	100	359
Boat ramp fees	0.15	0.18	0	100	363
Bait & tackle	1.29	0.38	0	100	364
Boat fuel	2.74	0.80	0	250	364
Lessons, Clinics, Camps	0.01	0.015	0	15	364
Other	0.00	0.00	0	0	364

Table 4.7 Average Expenditures Per Household Group Per Trip for Port Angeles

Expenditure Category	Mean	Standard Error	Minimum	Maximum	N
Parking	1.78	1.26	0	50	31
Car fuel	64.73	13.04	0	250	31
Airline Flight	0	0	0	0	31
Bus/Ferry/Train	31.68	7.81	0	180	31
Car rental	16.43	10.03	0	200	31
Lodging/Campsite fee	65.28	25.13	0	600	31
Food & Beverages from a store	27.24	7.94	0	200	31
Food & Beverages from a restaurant or Bar	92.37	20.9	0	300	31
Shopping and Souvenirs	48.66	11.44	0	300	31
Sundries	0.35	0.41	0	15	31
Dive equipment rental and air fills	1.39	1.91	0	80	31
Other Equipment rental	0	0	0	0	31
Boat rentals	0.84	1.28	0	60	31
Charter fees	0	0	0	0	0
Entrance fees	6.47	2.11	0	50	31
One-day fishing license fee	2.9	1.46	0	25	31
Boat ramp fees	0	0	0	0	31
Bait & tackle	0	0	0	0	31
Boat fuel	0	0	0	0	31
Lessons, Clinics, Camps	0	0	0	0	31
Other	20.54	12.53	0	250	31

Table 4.8 Average Expenditures Per Person-trip for OCNMS Legal Definition

Expenditure Category	Mean	Standard Error	Minimum	Maximum	N
Parking	1.06	0.43	0	50	111
Car fuel	20.35	2.46	0	225	109
Airline Flight	0.00	0.00	0	0	111
Bus/Ferry/Train	2.63	0.96	0	63.33	110
Car rental	0.08	0.05	0	4.09	112
Lodging/Campsite fee	35.95	6.15	0	500	111
Food & Beverages from a store	12.33	1.37	0	95	112
Food & Beverages from a restaurant or Bar	22.09	2.67	0	125	112
Shopping and Souvenirs	9.62	1.77	0	100	112
Sundries	2.36	0.56	0	47.50	111
Dive equipment rental and air fills	2.88	3.59	0	125	112
Other Equipment rental	0.60	0.46	0	55	112
Boat rentals	2.04	1.39	0	183.33	112
Charter fees	2.32	1.69	0	175	112
Entrance fees	1.17	0.46	0	55	112
One-day fishing license fee	0.61	0.35	0	33.33	110
Boat ramp fees	0.24	0.29	0	50	112
Bait & tackle	0.15	0.10	0	16.67	112
Boat fuel	0.91	0.77	0	125	112
Lessons, Clinics, Camps	0.00	0.00	0	0	112
Other	0.00	0.00	0	0	112

Table 4.9 Average Expenditures Per Person-trip for OCNMS 2km Buffer Definition

Expenditure Category	Mean	Standard Error	Minimum	Maximum	N
Parking	1.22	0.19	0	50	363
Car fuel	23.19	1.33	0	225	359
Airline Flight	0.60	0.53	0	300	363
Bus/Ferry/Train	2.17	0.41	0	63.33	362
Car rental	0.89	0.34	0	100	363
Lodging/Campsite fee	39.27	3.72	0	500	361
Food & Beverages from a store	13.72	0.82	0	100	361
Food & Beverages from a restaurant or Bar	22.33	1.49	0	200	362
Shopping and Souvenirs	8.90	1.11	0	140	363
Sundries	2.54	0.44	0	82.50	363
Dive equipment rental and air fills	0.68	0.37	0	125	363
Other Equipment rental	0.47	0.21	0	60	364
Boat rentals	1.40	0.55	0	183.33	363
Charter fees	1.43	0.74	0	450	364
Entrance fees	1.35	0.24	0	55	363
One-day fishing license fee	0.39	0.15	0	40	359
Boat ramp fees	0.08	0.09	0	50	363
Bait & tackle	0.42	0.13	0	33.33	364
Boat fuel	0.90	0.30	0	125	364
Lessons, Clinics, Camps	0.002	0.005	0	5	364
Other	0.00	0.00	0	0	364

Table 4.10 Average Expenditures Per Person-trip for Port Angeles

Expenditure Category	Mean	Standard Error	Minimum	Maximum	N
Parking	0.57	0.44	0	16.67	31
Car fuel	25.55	4.55	0	75	31
Airline Flight	0	0	0	0	31
Bus/Ferry/Train	12.18	3.13	0	90	31
Car rental	8.22	5.01	0	100	31
Lodging/Campsite fee	25.33	10.75	0	200	31
Food & Beverages from a store	9.53	2.4	0	50	31
Food & Beverages from a restaurant or Bar	31.22	6.54	0	100	31
Shopping and Souvenirs	19.03	3.92	0	75	31
Sundries	0.07	0.08	0	3	31
Dive equipment rental and air fills	0.7	0.95	0	40	31
Other Equipment rental	0	0	0	0	31
Boat rentals	0.28	0.43	0	20	31
Charter fees	0	0	0	0	31
Entrance fees	2.38	0.71	0	10	31
One-day fishing license fee	1.45	0.73	0	12.50	31
Boat ramp fees	0	0	0	0	31
Bait & tackle	0	0	0	0	31
Boat fuel	0	0	0	0	31
Lessons, Clinics, Camps	0	0	0	0	31
Other	10.27	6.27	0	125	31

Total annual expenditures were equal to the weighted average expenditures per person-trip times the annual number of estimated person-trips by spending category. Expenditures per person-day were then derived by dividing the total annual expenditures by category by the estimated total annual person-days. Tables 4.11-4.13 show the results of these calculations. The estimates of spending per person-trip and per person-day could be used in benefits transfer applications.

Table 4.11 Derivation of Total Expenditures and Expenditures Per Person-day for the OCNMS Legal Definition (2014 $)

Expenditure Category	Expenditures Per Person-trip	Expenditures Per Person-day	Total Expenditures
Parking	$1.06	$0.42	$278,567
Car fuel	$20.35	$8.08	$5,347,960
Airline Flight	$0.00	$0.00	$0
Bus/Ferry/Train	$2.63	$1.04	$691,161
Car rental	$0.08	$0.03	$21,024
Lodging/Campsite fee	$35.95	$14.27	$9,447,624
Food & Beverages from a store	$12.33	$4.89	$3,240,312
Food & Beverages from a restaurant or Bar	$22.09	$8.77	$5,805,230
Shopping and Souvenirs	$9.62	$3.82	$2,528,126
Sundries	$2.36	$0.94	$620,206
Dive equipment rental and air fills	$2.88	$1.14	$756,861
Other Equipment rental	$0.60	$0.24	$157,679
Boat rentals	$2.04	$0.81	$536,110
Charter fees	$2.32	$0.92	$609,694
Entrance fees	$1.17	$0.46	$307,475
One-day fishing license fee	$0.61	$0.24	$160,307
Boat ramp fees	$0.24	$0.10	$63,072
Bait & tackle	$0.15	$0.06	$39,420
Boat fuel	$0.91	$0.36	$239,147
Lessons, Clinics, Camps	$0.00	$0.00	$0
Other	$0.00	$0.00	$0
Total	$117.39	$46.60	$30,849,975

Table 4.12 Derivation of Total Expenditures and Expenditures Per Person-day for the OCNMS 2km Buffer Definition (2014 $)

Expenditure Category	Expenditures Per Person-trip	Expenditures Per Person-day	Total Expenditures
Parking	$1.22	$0.48	$1,016,247
Car fuel	$23.19	$9.20	$19,317,015
Airline Flight	$0.60	$0.24	$499,793
Bus/Ferry/Train	$2.17	$0.86	$1,807,586
Car rental	$0.89	$0.35	$741,360
Lodging/Campsite fee	$39.27	$15.59	$32,711,478
Food & Beverages from a store	$13.72	$5.45	$11,428,609
Food & Beverages from a restaurant or Bar	$22.33	$8.86	$18,600,644
Shopping and Souvenirs	$8.90	$3.53	$7,413,602
Sundries	$2.54	$1.01	$2,115,792
Dive equipment rental and air fills	$0.68	$0.27	$566,433
Other Equipment rental	$0.47	$0.19	$391,505
Boat rentals	$1.40	$0.56	$1,166,185
Charter fees	$1.43	$0.57	$1,191,174
Entrance fees	$1.35	$0.54	$1,124,535
One-day fishing license fee	$0.39	$0.15	$324,866
Boat ramp fees	$0.08	$0.03	$66,639
Bait & tackle	$0.42	$0.17	$349,855
Boat fuel	$0.90	$0.36	$749,690
Lessons, Clinics, Camps	$0.00	$0.00	$1,666
Other	$0.00	$0.00	$0
Total	$121.95	$48.41	$101,584,675

Table 4.13 Derivation of Total Expenditures and Expenditures Per Person-day for Port Angeles (2014 $)

Expenditure Category	Expenditures Per Person-trip	Expenditures Per Person-day	Total Expenditures
Parking	$0.57	$0.02	$33,799
Car fuel	$25.55	$0.72	$1,515,013
Airline Flight	$0.00	$0.00	$0
Bus/Ferry/Train	$12.18	$0.34	$722,225
Car rental	$8.22	$0.23	$487,413
Lodging/Campsite fee	$25.33	$0.72	$1,501,968
Food & Beverages from a store	$9.53	$0.27	$565,091
Food & Beverages from a restaurant or Bar	$31.22	$0.88	$1,851,221
Shopping and Souvenirs	$19.03	$0.54	$1,128,403
Sundries	$0.07	$0.00	$4,151
Dive equipment rental and air fills	$0.70	$0.02	$41,507
Other Equipment rental	$0.00	$0.00	$0
Boat rentals	$0.28	$0.01	$16,603
Charter fees	$0.00	$0.00	$0
Entrance fees	$2.38	$0.07	$141,124
One-day fishing license fee	$1.45	$0.04	$85,979
Boat ramp fees	$0.00	$0.00	$0
Bait & tackle	$0.00	$0.00	$0
Boat fuel	$0.00	$0.00	$0
Lessons, Clinics, Camps	$0.00	$0.00	$0
Other	$10.27	$0.29	$608,970
Total	$146.78	$58.26	$8,703,467

5. Economic Impact

To estimate economic impact/contribution of spending on local area economies for each jurisdiction or sub-area, the total annual expenditures for each jurisdiction or sub-area and definition of counties that define the study area where the majority of economic impact takes place were needed. Technically, one can extend the economic impact area to the world since many goods and services are imported and a portion of the economic impact takes place where these goods and services are produced. In this study, study areas were defined based on where the economic impact takes place that balances the objective of keeping the impacts as local as possible while still capturing much of the multiplier process.

The IMPLAN input-output model was used for estimating economic impact/contribution (Day 2011). All estimates from IMPLAN were converted to 2015 dollars using the Consumer Price Index for all Urban Workers 1982-84 (U.S. Department of Labor).

Study Area Definitions

In IMPLAN applications, the first thing needed was the definition of the study areas for where the economic impact will take place. As noted in chapter 4, primary counties are counties along the coast where the activity and direct spending occur. The secondary counties capture where inputs of production might come from. The major part of this would be the labor component referred to the "induced effect" portion of the multiplier process. This includes people who work in the primary counties, but live and spend their incomes in the secondary counties. The U.S. Department of Commerce, Bureau of the Census, Inter-county Commuters from the American Community Survey was used identify secondary counties. If at least 5,000 workers commuted from a secondary county to a primary county for work, the secondary county was included in the study area for estimating economic impact/contribution (Table 5.1).

Table 5.1 Primary and Secondary Counties for Economic Impact Analyses

<table>
<tr><td rowspan="2">Jurisdiction or sub-area</td><td colspan="8" align="center">Counties</td></tr>
<tr><td>Clallam</td><td>Grays Harbor</td><td>Jefferson</td><td>King</td><td>Kitsap</td><td>Mason</td><td>Pierce</td><td>Thurston</td></tr>
<tr><td>Outer Coast</td><td>Primary</td><td>Primary</td><td>Primary</td><td>Secondary</td><td>Secondary</td><td>Secondary</td><td>Secondary</td><td>Secondary</td></tr>
<tr><td>OCNMS Legal</td><td>Primary</td><td>Primary</td><td>Primary</td><td>Secondary</td><td>Secondary</td><td>Secondary</td><td>Secondary</td><td>Secondary</td></tr>
<tr><td>OCNMS 2KM Buffer</td><td>Primary</td><td>Primary</td><td>Primary</td><td>Secondary</td><td>Secondary</td><td>Secondary</td><td>Secondary</td><td>Secondary</td></tr>
<tr><td>Port Angeles</td><td>Primary</td><td>N/A</td><td>Secondary</td><td>Secondary</td><td>N/A</td><td>N/A</td><td>Secondary</td><td>N/A</td></tr>
</table>

Economic Measure Definitions from IMPLAN

IMPLAN model outputs reported here include output, value-added, income, and employment. The estimates for these measures include the "ripple effects" or "multiplier effects" from the initial spending by those recreating. Table 5.2 contains the definitions for these measures.

Table 5.2 IMPLAN Economic Indicators' Definitions

Indicator	*Definitions and Relationships*
Employment	Total annual average jobs. This includes self-employed and wage and salary employees, and all full-time, part-time and seasonal jobs, based on a count of full-time/part-time averages over 12 months
Labor Income	Defines the total value paid to local workers within a region. Labor income is the income source for induced household spending estimations. Labor Income = Employee Compensation + Proprietor Income
Value Added	Comprised of Labor Income, Indirect Business Taxes (IBT), and Other Property Type Income (OPTI), Value Added demonstrates an industry's value of production over the cost of its purchasing the goods and services required to make its products. Value Added is often referred to as Gross Regional Product (GRP). Value Added = Labor Income + IBT + OPTI

Output	The total value of an industry's production, comprised of the value of Intermediate Inputs and Value Added. In IMPLAN, this is typically viewed as the value of a change in sales or the value of increased production. However, annual production is not always equal to annual sales. If production levels are higher than sales, surpluses become inventory. Because inventory does not drive additional impacts in the year it was produced, in IMPLAN, Direct industry sales = Direct Output. Output = Intermediate Inputs + Value Added

Impact Types

The IMPLAN model also reports the types of impacts for each economic measure :
"direct," "indirect," "induced," and "total" effects. The indirect and induced effects
represent components of the "multiplier" process. The types of impacts are defined in
Table 5.3.

Table 5.3 Impact Type Definitions

Type of Impact	Definition
Direct Effect	The effect of spending by recreators at each business theypurchase goods or services from within the study area.
Indirect Effect	The result of a sector purchasing goods and services to produce their product from other industries located within the study area.
Induced Effect	Results from spending of employee wages that stem from both the direct and indirect effects within the study area.

Relationship between Spending Categories and IMPLAN Economic Sectors

The IMPLAN model has over 500 economic sectors. These sectors can be mapped into
the North American Industrial Classification System (NAICS) codes used by the federal
government in the U.S. national income accounts. After defining the study area for
impacts, the next step in implementing the IMPLAN model was to map each expenditure
category into the appropriate IMPLAN sectors. Table 5.1.4 shows how the expenditure
categories were mapped into the IMPLAN sectors using the NAICS codes.

Table 5.4 NAICS Codes used for Each Spending Category in IMPLAN Model

Category	NAICS Code
Parking	422
Car Fuel	326
Airline Flight	
Bus/Ferry/Train Ticket	336
Car Rental	362
Lodging/Campsite Fee	411
Food and Beverages from a Store	324
Food and Beverages at a Restaurant or Bar	413
Shopping and Souvenirs	330
Sundries	330
Dive Equipment Rental and Airfills	410
Equipment Rental	410
Boat Rental	410
Charter Fee	410
Park Entrance, Museum, Aquarium, or Other Entrance Fee	422
One-day Fishing License Fee	Govt
Boat Ramp Fees	410
Bait and Tackle	410
Lessons, Clinics, Camps	410
Boat Fuel	326
Other	330

OC Results

Chapter 4 discussed how expenditures for the OC were broken down into separate estimates for residents and non-residents of the area of economic impact. Here the same break-down in results are presented. Table 5.5 shows the IMPLAN model results for residents, Table 5.6 shows the results for non-residents, and Table 5.7 shows the results of the combined resident and non-resident impacts.

Table 5.5 Outer Coast Resident Economic Contributions (2015$)

Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	267	$7,927,090	$12,801,503	$21,791,225
Indirect Effect	44	$2,669,185	$4,475,678	$7,281,197
Induced Effect	62	$3,185,776	$5,707,453	$8,753,937
Total Effect	373	$13,782,051	$22,984,634	$37,826,358

Table 5.6 Outer Coast Non-Resident Economic Contributions (2015$)

Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	4,378	$132,764,184	$216,705,542	$368,408,140
Indirect Effect	747	$45,118,127	$75,285,259	$122,029,894
Induced Effect	1,033	$53,489,800	$95,830,844	$146,980,448
Total Effect	6,158	$231,372,112	$387,821,645	$637,418,482

Table 5.7 Outer Coast Total Economic Contributions (2015$)

Impact Type	Employment	Labor Income	Value Added	Output
Residents	373	$13,782,051	$22,984,634	$37,826,358
Non-Residents	6,158	$231,372,112	$387,821,645	$637,418,482
Total Impacts	6,531	$245,154,163	$410,806,279	$675,244,840

Table 5.8 OCNMS Legal Definition Economic Contributions (2015$)

Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	276	$8,244,822	$13,560,184	$23,029,126
Indirect Effect	47	$2,814,837	$4,669,217	$7,570,606
Induced Effect	64	$3,325,574	$5,957,988	$9,138,083
Total Effect	387	$14,385,233	$24,187,389	$39,737,816

Table 5.9 OCNMS 2 KM Buffer Economic Contributions (2015$)

Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	834	$26,257,861	$43,383,143	$74,225,122
Indirect Effect	152	$9,206,855	$15,188,125	$24,682,255
Induced Effect	206	$10,665,737	$19,108,668	$29,307,570
Total Effect	1,192	$46,130,453	$77,679,936	$128,214,947

Table 5.10 Port Angeles Economic Contributions (2015$)

Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	76	$2,452,466	$3,877,242	$6,252,842
Indirect Effect	12	$740,054	$1,218,528	$1,947,658
Induced Effect	18	$950,721	$1,680,638	$2,554,795
Total Effect	106	$4,143,241	$6,776,408	$10,755,295

Using the results in Tables 5.5-5.10 and the initial expenditure estimates, multipliers can be derived for spending to total output, spending to total value-added, spending to total income, and spending to total employment. Tables 5.11 – 5.12 provide the multipliers for residents, non-resident and total resident and non-resident spending. These multipliers tell us how much impact was generated per dollar of spending for labor income, value-added and output. For employment, the multiplier was the number of employees per $100,000 in spending. Since the dollars in Tables 5.5-5.10 are in 2015 dollars and expenditure tables in Chapter 4 are in 2014 dollars, so expenditures were converted to 2015 dollars

for the multiplier calculations using the Consumer Price Index for All Urban Workers. The factor to multiply 2014 dollars by to get 2015 dollars was 1.006674.

The multipliers can be used to estimate the economic impact of new spending projected from a project or management action in each jurisdiction or sub-area. For example, suppose a marketing campaign increased spending by recreators in the OC by $100,000. Then that spending would generate 1.17 more employees, $43,000 in labor income, $72,000 in value-added, and $119,000 in total output in the OC local economy.

As discussed in Chapter 4, the resident and non-resident break-down is important in some applications due to possible double-counting of resident spending and the associated impacts. The reason is that, in regional economic theory, non-residents of the study area for impact are bringing new dollars into the economy that has multiplier impacts. Recreation by non-residents is considered a "basic" or "export" industry because of the injection of new dollars into the economy. Recreation by residents of the study area are spending local dollars derived from the multiplier process of the "basic" or "export" industries in the economy. Part of the impacts of resident spending may come from the multiplier process of the non-resident spending and therefore includes double-counting or from the multiplier impacts from other "basic" or "export" industries. However, part of resident spending may not involve double-counting. Retirement is a "basic" or "export" industry because it brings new dollars into the economy unrelated to any work in the local economy. Many retirees undertake recreation activity in the study area and in most applications this would not involve double-counting. The other exception is when employing the "import substitution" argument. If an oil spill occurred in the study area and residents leave the area to recreate outside the study area, then the local economy would lose this spending. For the nation, the net loss might be zero as it would involve just a different spatial distribution of the impact (i.e., one community loses and another gains). However, for the community that suffers losses, the impacts are real, so the impacts to residents are included in the numbers with the capability to exclude them for applications where the distinction might be important (deriving multipliers for a local economy where the distinction between "basic" and local industries is important).

Table 5.11 Multipliers for Resident and Non-Residents Spending in the Outer Coast of Washington

Type of Visitor	Employment[1]	Labor Income[2]	Value-Added[2]	Output[2]
Residents	1.17	0.43	0.72	1.19
Non-residents	1.18	0.44	0.74	1.22
Total	1.18	0.44	0.74	1.22

1. Number of employees per $100,000 in spending
2. Dollars generated per dollar of spending

Table 5.12 Multipliers for Spending in OCNMS – Legal, OCNMS 2 KM Buffer and Port Angeles

Jurisdiction or sub-area	Employment[1]	Labor Income[2]	Value-Added[2]	Output[2]
OCNMS- Legal	1.25	0.46	0.78	1.28
OCNMS - 2 km	1.17	0.45	0.76	1.25
Port Angeles	1.21	0.47	0.77	1.23

1. Number of employees per $100,000 in spending
2. Dollars generated per dollar of spending

6. Conclusions and Future Research

Partnerships

The scope of the research addressed in this project was beyond the capabilities of any one entity. This project demonstrates the power of partnerships. The State of Washington under their Marine Spatial Planning (MSP) contributed by funding Point97 and The Surfrider Foundation to undertake the study of recreation uses on the Outer Coast of Washington (OC). The spatial use component allowed ONMS and NCCOS to evaluate how they could join the study to meet the objectives of the Olympic Coast National Marine Sanctuary (OCNMS).

NCCOS in Fiscal Year (FY) 2015 initiated a new strategic effort to provide scientific support to national marine sanctuaries. NCCOS's funding and staff support allowed for not only OCNMS meeting their needs, but strengthening the data via expanded sample sizes from the surveys, which is always a good thing in survey research. Expanded samples sizes were doubled for the State of Washington's MSP for recreation uses increasing the reliability of the data. It also allowed for developing estimates of use and other profiles of users (e.g. demographics: expenditures and associated impacts of the local area economies; importance-satisfaction ratings for 25 natural resources attributes, facilities and services; and the non-market economic values of the recreation uses and how those values change with the changes in natural resource attributes and user characteristics) for multiple jurisdictions/sub-areas.

Limitations

Although the study developed a significant body of socioeconomic information, the information was limited to only the recreation use of the OC by the State of Washington households, so it only represents an estimate of this proportion of recreation use. Since the importance-satisfaction ratings were only included in wave 2 of the survey there was half the sample size than for other survey components and there was not adequate sample sizes to support estimates of importance-satisfaction ratings for Port Angeles.

Uses of the Information

OCNMS Management Plan/Condition Reports. The study met several objectives of the OCNMS Management Plan's Socioeconomic component by estimating use for recreation and providing important information for understanding the extent of use and its spatial distribution and understanding how the sanctuary fits in the larger regional context in supplying the recreation ecosystem service. The information will also supply the deep research behind the development of socioeconomic indicators necessary for evaluating the recreation ecosystem service in future OCNMS Condition Reports.

MSP/Ecosystem-based Management. As noted above, the information developed will also support the State of Washington in their MSP process or other agencies engaged in MSP and/or ecosystem-based management, which requires connecting natural resources with how users use those resources and benefit from the protection and restoration of those resources.

Damage Assessment/Restoration/Resource Protection. The State of Washington, NOAA, and other federal agencies are co-trustees for damage assessments when resources are damaged by a responsible party to sue to recover funds for the injuries to compensate those impacted and provide funds for restoration of the resources damaged. The information can also be used in benefit-cost analyses of investments in resource protection and restoration projects where responsible parties for the damage cannot be identified. The non-market economic values support these uses. For private businesses, they can sue for damages for lost income; the market economic measure of income can be used in these cases.

Education/Outreach. Students can benefit by using the information to do Honor's papers, Master's Theses, and Ph.D. Dissertations. This fulfills a NOAA goal of educating the scientists of the future. OCNMS and state and local education and outreach staff can use the information to better understand their users; who are the users, what are they doing, how do they perceive the condition of natural resources they use in doing their activities and how do they value those resources. Further research on the data could explore multiple relationships.

Business Plans/Marketing. Private businesses are often times major users of the type of information developed in this project. The information will support business plans for new businesses or expansion of existing businesses vying to meet the demand for support services recreation users want while undertaking their activities. Bankers or other investors usually want some quantitative information before granting loans to businesses and the information in this study can provide important information for this purpose. Businesses, like agency Education and Outreach staff can develop marketing campaigns by bettering understanding their users. The importance-satisfaction scores will directly support this use.

Future Research

This technical appendix and two main reports this appendix documents covers only demographics of recreation users; detailed uses by type of activity and their spatial distribution; and users expenditures and the associated economic impact on local area economies. The results are mostly descriptive and given the multi-dimensionality of the data, much more multivariate analyses are possible.

Future reports will also soon follow what was presented here and their companion "Main" reports that only provide results. The first will be the report on the importance-

satisfaction ratings of 25 natural resource attributes, facilities and services for the OC and some of the jurisdiction or sub-areas. The next set of reports address the non-market economic values and how these values change with changes in natural resource attribute conditions and user characteristics. As with the other information addressed in this technical appendix, there will be many opportunities to support further research in multivariate analyses. All the data and documentation will be provided to other researchers on request.

Although we have produced estimates for other jurisdictions: Olympic National Park – Coastal Area and Olympic National Park-Inland, and for three of the four Coastal Treaty Tribes (Makah, Quileute and the Quinault Nation) the results need to be further reviewed and approved for distribution by these jurisdiction's leaders. We will continue to work with these entities to determine what can be done to serve their needs.

A major limitation of this study was the inclusion of only State of Washington households. Currently it is unknown what portion of the recreation use is accounted for by State of Washington households on the OC. Given the existence of both the ONP and the OCNMS, it is expected that this could be a significant component of total recreation use and value. NCCOS had originally proposed implementing their "Social Values Mapping" survey for the OC. In meetings with the ONP and the four Coastal Treaty Tribes, discussions to supplement this study with the Social Values Mapping survey to get a more complete profile of recreational use and value occurred. The current study was based on a random sample of Washington households and done through an Internet Panel survey. Members of the four Coastal Treaty Tribes had a low probability of inclusion and the members of the tribes are not likely represented. The Social Values Mapping survey is an on-site survey and could be designed to make sure objectives of the ONP and the Coastal Treaty Tribes and ensuring good representation of tribal members use and values are being met. This study would also provide more complete information in assessing the recreation ecosystem service for OCNMS Condition Reports and for all agencies engaged in ecosystem-based management for the resources in the OC.

References

Bureau of Economic Analysis. (2015). Regional Data.
http://www.bea.gov/iTable/iTable.cfm?reqid=70&step=1&isuri=1&acrdn=5#reqid=70&step=1&isuri=1

Day, Francis. 2011. Principles of Impact Analysis & IMPLAN Applications. First Edition. MIG.

Point 97 and Surfrider Foundation (2015). An Economic and Spatial Baseline of Coastal Recreation in Washington. Report to the Washington Department of Natural Resources. Portland, Oregon.

Leeworthy, Vernon R., Schwarzmann, Danielle, Reyes Saade, Daniela, Goedeke, Theresa, Gonyo, Sarah and Bauer, Laurie. 2015a. A Socioeconomic Profile of Recreating Visitors to the Outer Coast of Washington and the Olympic Coast National Marine Sanctuary: Volume 1, 2014. *Marine Sanctuaries Conservation Series ONMS-**-**. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Office of National Marine Sanctuaries, Silver Spring, MD. ** pp.*

Leeworthy, Vernon R., Schwarzmann, Danielle, Reyes Saade, Daniela, Goedeke, *Theresa, Gonyo, Sarah and Bauer, Laurie. 2015b.* Market Economic Impacts and Contributions of Recreating Visitors to the Outer Coast of Washington and the Olympic Coast National Marine Sanctuary: Volume 2, 2014. Marine Sanctuaries Conservation Series ONMS-**-**. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Office of National Marine Sanctuaries, Silver Spring, MD. ** pp.

Leeworthy, Vernon R., Schwarzmann, Danielle, Reyes Saade, Daniella, Goedeke, Theresa, Gonyo, Sarah and Bauer, Laurie. 2015c. Importance-Satisfaction Ratings for Natural Resource Attributes Facilities and Services in the Coastal and Ocean Areas of the Outer Coast of Washington State: Volume 3, 2014. Marine Sanctuaries Conservation Series ONMS-**-**. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Office of National Marine Sanctuaries, Silver Spring, MD. 35 pp.

SAS Institute, Inc. 2004. SAS/STAT 9.1 User's Guide and Version 9.4 Software, Cary, NC, USA.

U.S. Department of Commerce, Census Bureau. 2015. 2010 Population for State of Washington, on-line. http://quickfacts.census.gov/qfd/states/53000.html

U.S. Department of Commerce, Census Bureau 2006-2010. Table 1. Residence County to Workplace County Flows for the United States and Puerto Rico Sorted by Residence Geography 2006-2010 and Table 2. Residence County to Workplace Flows for the United States and Puerto Rico by Workplace Geography 2006-2010.
http://www.census.gov/population/metro/data/other.html

U.S. Department of Labor. 2015. Consumer Price Index for All Urban Workers, On-line Calculator. http://www.bls.gov/data/inflation_calculator.htm

Appendix A: Point97/Surfrider Wave 1 Survey Questionnaire

Washington Pacific Coast Ocean and Coastal Recreation Survey Instrument

Methodology Statement

To develop a consistent methodology and thus comparable data sets across west coast states, this survey instrument is modeled after similar ocean and coastal recreation data collection projects in Oregon[1] and California[2]. Following these proven methods, the project team, with input from regional stakeholders, will develop a survey instrument designed to collect data from Washington residents through two complimentary methodologies:

Probability Based Sample of Standing Internet Panel: Provides a probability based sample based on demographic and geographic location of residents in Washington. This sample allows us to extrapolate results to provide extrapolated activity participation rates of ocean and coastal recreation users, maps of the extent and intensity of ocean and coastal recreation on the Pacific Coast of Washington, and spatially explicit expenditure profiles for coastal recreation activities; and

Non-Random Internet "Opt-In": Collects spatial and economic data on more specialized activities that may not have been adequately represented in the internet panel, such as surfing, kayaking, and SCUBA diving, through an "opt-in" method.

A. Probability Based Sample of Standing Internet Panel Methodology
This methodology utilizes a standing internet panel hosted by a private provider, Knowledge Networks (KN), who is a leader in deploying custom online surveys. This approach surveys a random yet probability based sample of residents in the Washington, allowing us to extrapolate results to the population. To capture seasonal effects, we will conduct the panel surveys in two waves. This survey effort will collect a wide range of data, including data on respondents' overall ocean and coastal recreation trip frequency and activities in the last year, as well as specifics on the last ocean and coastal recreation trip. Respondents cannot self-select for this survey mode.

An internet panel approach provides several distinct advantages, including:
The online panel approach is probability-based, allowing extrapolation to a larger population;
We can collect spatial data, which cannot be done with a random digital (RDD) phone survey;
The cost of a completed online survey is substantially less than a completed in-person survey; and
With the lower costs, this approach can be replicated more often and comparable with other states such as in California and Oregon.

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[1] LaFranchi, Chris and Collin Daugherty (2011). Non-consumptive Ocean Recreation in Oregon: Human Uses, Economic Impacts & Spatial Data. Submitted under a joint effort of the Surfrider Foundation, NaturalEquity, and Ecotrust. Funded by the Packard Foundation.

[2] Chen, C., LaFranchi, C., Sheeran, K., and Steinback, C. To be submitted in April 2013. Spatial patterns of coastal recreation in the North Central Coast of California. Report to California Sea Grant, the Ocean Science Trust Monitoring Enterprise, California Ocean Protection Council in support of baseline MPA monitoring efforts.

While the internet panel methodology collects a wide-range of statistically robust coastal recreation data, this methodology is unable to collect data with adequate statistical power on coastal recreation activities practiced by a smaller portion of the population (e.g., surfing, kayaking, SCUBA diving), hence the need for the non-random internet "opt-in" methodology.

B. Non-Random Internet "Opt-In" Methodology
This survey methodology will engage ocean and coastal recreation stakeholders and deploy targeted outreach strategies (e.g., engagement with user groups/association, utilizing membership/email lists, online discussion boards, flyers, etc) to solicit participation in an opt-in method of data collection in which respondents will be asked about their last trip activities as well as specific activities they are most interested in. For their last trip activities respondents will be asked to identify a primary activity for the trip as well as estimate trip expenditures. For all activities, respondents will be asked to map the locations they conducted those activities.

Collecting data using an internet "opt-in" mode provides the following advantages:
Provides a participatory approach and engages and builds stakeholder investment in state marine planning and policy; and
Provides the ability to collect data and obtain larger sample sizes from specific user groups (e.g. SCUBA divers, kayakers, etc) that are difficult to adequately capture in the internet panel option; and
Increases the likelihood that stakeholders will trust the survey results and therefore accept their use in policy-making processes.

Project Deliverables

These two complimentary methodologies will provide spatial data on a wide array of ocean and coastal recreation activities, as well as coastal recreation statistics and economic expenditures extrapolated to state populations. More specifically, if we are able to deploy the survey instrument using the two methodologies the project outputs include:

Random Sample of Standing Internet Panel Methodology
Estimates of total population size of coastal recreational users;
Estimates of user population size and demographics for specific coastal recreational activities;
Maps depicting spatial patterns of use (extent and intensity of use quantified by the number of trips) for overall and specific coastal recreational activities;
Maps depicting spatial patterns of the economic value attributed to overall and specific coastal recreational activity locations; and
Estimates of the economic contribution (based on extrapolated trip expenditures) of overall coastal recreational use and specific coastal recreational activities at the state level.

Non-Random Internet "Opt-In" Methodology

Maps depicting spatial patterns of use (extent and intensity of use) for specific coastal recreational activities. These maps may be aggregated into activity groupings to help facilitate their use in planning and policy contexts;
Demographic and economic expenditure profiles of specific coastal recreation activities (e.g., surfing, kayaking, clamming, and SCUBA diving); and

Stakeholder investment and engagement in state marine planning efforts through baseline data development and review.

Survey Registration Page
Respondents would enter the survey through a webpage URL (TBD) which contains a description of the project and the general description of the content of the survey. The respondent would then register into the survey, review a consent statement and begin the survey.

Email Language:

Hello,
You recently submitted your e-mail address to take a survey on ocean and coastal recreation in the Pacific coast of Washington. The link below will take you to the survey. Use this same link again if you need to stop and come back to the survey, your information will be saved.

<insert unique ID link here>

The survey should take approximately 10 to 15 minutes to complete. By clicking on this link you verify that you are 18 years of age or older and agree to participate in this survey and provide your information to Surfrider. If you need technical assistance please contact us at surveysupprot@surfrider.org.

Thank you for participating!
 Surfrider Foundation

Survey Entrance Page
We are conducting a survey of coastal and ocean recreation activities conducted along the Pacific coast of Washington. We want to hear from you even if you have not visited the coast recently.

Please remember that all your individual information will be kept private and that survey results will be presented in summarized form. If you need to stop and come back to the survey, simply use the survey link sent to your email--all your information will automatically be saved. If you'd like to go back to any survey question, please use the browser back button.

[Demographic questions are asked in a separate survey module by Knowledge Networks (the online survey provider)]

Q1. We are interested in knowing about your coastal and ocean recreation activity on the Pacific coast of Washington. Have you been to the Pacific coast of Washington (dark blue area) at least once in the last 12 months?
[Insert Figure: Map of region, with shaded area distinguishing study region.]

- Yes……………………………………Continue

- No……………………………….Exit Interview

Q2. Please estimate how many trips you have made to the Pacific coast of Washington (see yellow area) in the last 12 months. Again a trip is defined as an **intentional trip** to the Pacific coast of Washington **separate from your daily routine**.
[NUMBER BOX; RANGE 1T365]

Q3. You previously responded that you made [from Q2] trips(s) to the Pacific coast of Washing in the last 12 months. Please indicate how many trips were made for the following primary purposes. The primary purpose is what primarily motivated you to take the trip(s) outside of your daily routine.

Outdoor Recreation Leisure/Tourism Visiting Family/Friends Work Travel
Other

NOTE:
Outdoor Recreation includes activities such as beach going, sightseeing/scenic enjoyment, hiking, biking, walking, kayaking, boating/sailing, camping, photography, swimming, clamming, fishing, etc.

Leisure and Tourism includes activities such as dining, shopping, golf, attending festivals/events, eating at restaurants, etc.

Q4. We are interested in knowing what types of outdoor recreation activities you do when you go to the Pacific coast of Washington. Which of the following activities have you participated in **during the last 12 months** in the Pacific coast of Washington?

[PLEASE SHOW OPTIONS IN ONE LIST BUT RANDOMIZE ORDER OF SECTIONS. DO NOT INSERT HEADER]

[SECTION 1]
Beach going (sitting, walking, jogging/running, dog walking, kite flying, etc.)
Beach driving
Hiking or Biking
Camping
Photography
[SECTION 2]
Sightseeing/Scenic enjoyment
Sitting in your car watching the scene
Collection of nonJliving resources (agates, driftwood, beach glass, etc)
Watching birds, whales, seals and/or other marine life from shore
Watching birds, whales, seals and/or other marine life from private boat
Watching birds, whales, seals and/or other marine life from charter boat/guide service
Horseback riding
Tide pooling

[SECTION 3]
Fishing from shore/pier (e.g. hook and line, crabbing, spearfishing, etc.)
Fishing from private boat (e.g. hook and line, crabbing, spearfishing, etc.)
Fishing from charter boat/guide service (e.g. hook and line, crabbing, spearfishing, etc.)
Collecting/picking/harvesting sea life from shore (clamming, seaweed, mussels, etc.)
Hang gliding / parasailing
Skim boarding
Surfing (from board or kayak)
Swimming or body surfing
[SECTION 4]
Windsurfing/Kite boarding
Personal watercraft (jet skis, wave runner)
Snorkeling/free diving from shore
Snorkeling/free diving from private boat
Snorkeling/free diving from charter boat/guide service
aa) Kayaking or other paddling activity (canoe, stand up paddle board, Tribal canoe journey) bb) Boating/sailing
cc) SCUBA diving from shore
dd) SCUBA diving from private boat
ee) SCUBA diving from charter boat/guide service ff) Other, please list:
[TEXTBOX]

Q5. For how long have you been visiting the Pacific coast of Washington and enjoying one or more of the activities you identified?
Just the last year   1
One to three years   2
About four to ten years   3
More than ten years   4
All my life   5

Q6. Below is a map of the coastal counties within the Pacific coast of Washington. You previously responded that you visited this area **[INSERT RESPONSE FROM Q3]** time(s) for outdoor recreation in the last 12 months. Please indicate how many times you visited each of these coastal counties for outdoor recreation in the last 12 months on the map below. If you did not visit a particular coastal county, please choose 'zero'. Your best estimate of the county is fine.

HERE WE HAVE A MAP OF THE STUDY AREA THAT INCLUDES THE COUNTIES OF THE WASHINGTON PACIFIC COAST. For each county the respondent should be prompted to tell us how many visits they made to the county in the last 12 months.

[PLEASE ENSURE THE RESPONSES ADD UP TO AT MINIMUM THE RESPONSE IN Q3] [PROMPT ONCE]

-

Information Page:

The following questions are about your **last trip** to the Pacific coast of Washington (see yellow are on map) that was primarily for outdoor recreation purposes. A trip is defined as an **intentional trip** – **separate from your daily routine**.

For coastal residents, daily routine activities could include daily dog walks on the beach or driving along the coast to get to work or the store. An intentional trip (e.g., day/weekend trips, vacations, etc) is NOT a part of your daily routine.

Based on this, we'd like you to answer the following questions about your **last trip** to the Pacific coast of Washington that was **primarily for outdoor recreation**.

Q7. What was the date of your **last trip** to the Pacific coast of Washington that was **primarily for outdoor recreation purposes**. Your best estimate is fine. [SHOW STUDY REGION MAP]
[INSERT CALENDAR FOR RESPONDENT TO INDICATE DATE]

Date:

Q8. How many days and nights did you spend at the coast during your **last trip** to the Pacific coast of Washington that was **primarily for outdoor recreation** purposes?
[FILL IN BOXES]

Q9. On your **last trip** to the Pacific coast of Washington that was **primarily for outdoor recreation purposes**, did you start your trip from your home?
- Yes…………………………………………………1
- No…………………………………………………..2

Q10. Since you did not start your last trip from home, what city and state did you start your trip from? [Appears only if answered no to Q9]

City: Fill In State: Fill In
Q11. What was the primary mode(s) of transportation you used to get to the Pacific coast of Washington on your **last coastal recreation trip**?
Bus   1
Bike   2
Fly   3
Walking   4
Drove personal car   5
Drove a rented car   6
Rode with someone else – carpooled   7
Train   8
Ferry (without a personal vehicle)   9
Other, please specify: **[TEXTBOX]**   10

Q12a. How would you describe the car that you used to get to the Pacific coast of Washington on your last trip?
[Appears if selected drove a personal/rented car in Q11}

Compact car, small sedan, or hybrid Medium sedan
Large sedan/Wagon
SUV, Pickup trucks, or Mini van Other (fill in)

Q12b. How many people (including yourself) were in the vehicle with you on the last trip?
[FILL IN BOX]

Q12c. How many of those passengers were your children/dependents?
[FILL IN BOX]

Q13a. Approximately how many people (including yourself) went on your last trip to the Pacific coast of Washington that was primarily for outdoor recreation purposes?
[FILL IN BOX]

Q13b. Approximately how many people on your last trip were under the age of eighteen?
[FILL IN BOX]

Q14. During your last trip to the Pacific coast of Washington, what outdoor recreation activities did you participate in?
[PLEASE SHOW OPTIONS IN ONE LIST BUT RANDOMIZE AND RECORD ORDER OF SECTIONS. DO NOT INSERT HEADER]

[SECTION 1]
Beach going (sitting, walking, jogging/running, dog walking, kite flying, etc.)
Beach driving
Hiking or Biking
Camping
Photography
[SECTION 2]
Sightseeing/Scenic enjoyment
Sitting in your car watching the scene
Collection of nonJliving resources (agates, driftwood, beach glass, etc)
Watching birds, whales, seals and/or other marine life from shore
Watching birds, whales, seals and/or other marine life from private boat
Watching birds, whales, seals and/or other marine life from charter boat/guide service
Horseback riding
Tide pooling
[SECTION 3]

Fishing from shore/pier (e.g. hook and line, crabbing, spearfishing, etc.)
Fishing from private boat (e.g. hook and line, crabbing, spearfishing, etc.)
Fishing from charter boat/guide service (e.g. hook and line, crabbing, spearfishing, etc.)
Collecting/picking/harvesting sea life from shore (clamming, seaweed, mussels, etc.)
Hang gliding / parasailing
Skim boarding
Surfing (from board of kayak)
Swimming or body surfing
[SECTION 4]
Windsurfing/Kite boarding
Personal watercraft (jet skis, wave runner)
Snorkeling/free diving from shore
Snorkeling/free diving from private boat
Snorkeling/free diving from charter boat/guide service
aa) Kayaking or other paddling activity (canoe, stand up paddle board, Tribal canoe journey) bb) Boating/sailing
cc) SCUBA diving from shore
dd) SCUBA diving from private boat
ee) SCUBA diving from charter boat/guide service ff) Other, please list:
[TEXTBOX]

Q15. Of the outdoor recreation activities you selected what was your primary activity during your **last coastal recreation trip** to the Pacific coast of Washington? (please select only one)
[PLEASE SHOW ACTIVITIES SELECTED IN QUESTION Q11 and ONLY ALLOW THE SELECTION OF ONE PRIMARY ACTIVITY]

Q16. Mapping of Ocean and Coastal Recreation activity locations
[MAPPING COMPONENT OF SURVEY]
In the mapping component the respondent will be presented with a navigable map of the coast (e.g., Google maps) and will be ask:
Navigate the map or use search function to zoom to the areas which they conducted ocean and coastal recreation activities on their last trip.
The user can utilize a search function (similar to google maps) to zoom to specific areas
The user can zoom in and out and move the map around to navigate the map to specific areas
If the use zooms out to far and attempts to drop an activity marker they will be prompted to zoom further in.
For each activity marker placed the user will be asked to:
Associate one or more activity with the activity marker they place on the map
In addition, respondents are asked:
How many hours did you spend at this location on your last trips?
Please indicate why you chose to recreate at this particular place on this trip:
The water is clean, clear and/or good to swim in

The site has good facilities/amenities/access (e.g. parking, bathrooms, picnic tables, marina, camping, trails, etc)
The site is beautiful or has striking natural features
The site is perfect for my particular activity (e.g. surf break, fishing area, dive site, etc)
Wildlife is abundant and diverse
It's close to home/work/where I'm staying
The site is large and offers room for exploration
The site is secluded, away from crowds, and offers privacy
This is where my friends or family have always gone
I have lots of memories from this place
This is a spiritual/inspiring place for me
There are specific natural resources I like to collect here
It is a place I can learn about, teach, or research the natural environment
I feel healthier after going to this place
Once all activity markers have been placed the activity markers for the primary activity indicated in the previous portion of the survey will be presented
Users will be prompted to distribute 100 pennies across this primary activity to indicate the relative importance of each location to their activity on their last trip
This distribution of value will then be subsequently used with the trip expenditure data collected further in the survey to estimate the value of coastal and ocean recreation areas.

Q17a. During your **last trip** to the Pacific coast of Washington that was primarily for outdoor recreation purposes, please indicate if your party spent money on the following items.

Parking
Car fuel
Airline flight
Bus/Ferry/Train ticket
Food and beverages from a store
Food and beverages at a restaurant or bar
Shopping and souvenirs (tJshirts, posters, gifts, etc.)
Sundries (sunscreen, surf wax, motion sickness pills, batteries, camera data cards, etc.)
Car rental
Dive equipment rental and airfills
Equipment rental (Surfboard, bike, kayak, stand up paddle, etc)
Lodging/Campsite Fee (if you stayed overnight)
Charter fee (whale watching, etc.)
Park entrance, museum, aquarium, or other entrance fee
Lessons, clinics, camps
OneJday fishing license fee
Bait and tackle
Boat fuel
Boat rental
Boat ramp fees
Other, please list **[TEXTBOX; PROMPT ONCE IF SELECTED BUT TEXT IS NOT ENTERED]**

Q17b. During your **last coastal recreation trip** to the Pacific coast of Washington, please estimate how much money **your party** spent on the following items and the number of people it covered. [For Q14b show indicated expenditures from Q14a] [GRID, NUMBER BOXES]
[All responses are required to be filled in]

Expense item	Cost: [NUMBER BOX, , RANGE IS 0T10000]	# of people covered
Parking		
Car fuel		
Food or beverage from a store		
List continues…		

[ENDDISPLAY]
Thank you so much for participating in our survey. We appreciate your help and input!

Appendix B: ONMS/NCCOS Add-on Questionnaire for Wave 2

MANAGEMENT OPTIONS FOR THE OUTER COAST OF WASHINGTON -- WHAT IS YOUR OPINION?

Sometimes the Government considers starting a new program or expanding existing programs. The Government does not want to start a new program or expand existing programs unless people are willing to pay for it. One way for the Government to find out about this is to give people like you information about a program in a survey like this, so you can make up your own mind about it.

Some people think the program they are asked about is not needed; others think it is. We want to get the opinions of all kinds of people.

The particular program addressed in this survey involves the natural resources, facilities and services that people use when doing non-consumptive types of recreation on the State of Washington's Outer Coast. The federal, state and local governments are considering options to increase the protection and restoration of the natural resources and improve the facilities and services on the Outer Coast of Washington, but it is not sure if it should do more, because this will require more government spending paid for all residents and visitors.

We will provide you with information to help you answer the questions. Through this survey, government officials will consider your opinions, along with information from scientists and planners, when deciding what more, if anything, to do.

WARMUP QUESTIONS

Below is a list of birds that can be found on or along Washington's Outer Coast. Please tell us how much you like or dislike each of the animals listed below:

	Strongly Like	Like	Slightly Like	Neither Like nor Dislike	Slightly Dislike	Dislike	Strongly Dislike	I don't know of this animal
Puffins								
Ducks								
Hawks								
Plovers								
Sandpipers								
Sea gulls								

Terns							
Eagles							

Below is a list of marine mammals that can be found on or along Washington's Outer Coast.
Please tell us how much you like or dislike each of the marine animals listed below:

	Strongly Like	Like	Slightly Like	Neither Like nor Dislike	Slightly Dislike	Dislike	Strongly Dislike	I don't know of this animal
Seals/Sea lions								
Dolphins/Porpoises								
Whales								
Killer whales/ Orcas								
Sea otters								

Below is a list of other marine animals that can be found on or along Washington's Outer Coast.
Please tell us how much you like or dislike each of the animals listed below:

	Strongly Like	Like	Slightly Like	Neither Like nor Dislike	Slightly Dislike	Dislike	Strongly Dislike	I don't know of this animal
Sea urchins								
Starfish/Seastars								
Sharks								
Corals								
Sea anemones								

Please indicate to what extent you agree with the following statements:

	Strongly Agree	Agree	Slightly Agree	Neither Agree nor Disagree	Slightly Disagree	Disagree	Strongly Disagree
When I go to the Outer Coast I never want to see animals that I don't like.							
When I go to the Outer Coast I always want to see animals that I like.							
We are approaching the limit of the number of people the Earth can support.							
Humans have the right to modify the natural environment to suit their needs.							
When humans interfere with nature it often produces disastrous consequences.							
Human ingenuity will insure that we do not make the Earth unlivable.							
Humans are seriously abusing the environment.							
The Earth has plenty of natural resources if we just learn how to develop them.							
Plants and animals							

have as much right as humans to exist.							
The balance of nature is strong enough to cope with the impacts of modern industrial nations.							
Despite our special abilities, humans are still subject to the laws of nature.							
The so-called "ecological crisis" facing humankind has been greatly exaggerated.							
The Earth is like a spaceship with very limited room and resources.							
Humans were meant to rule over the rest of nature.							
The balance of nature is very delicate and easily upset.							
Humans will eventually learn enough about how nature works to be able to control it.							
If things continue on their present course, we will soon experience a major ecological catastrophe.							

I would be willing to pay much higher taxes in order to protect the environment.						
I would be willing to accept cuts in my standard of living to protect the environment.						
I would be willing to pay much higher prices in order to protect the environment.						

Please look at the following pictures that depict different levels of visitor use at a beach on the Outer Coast and answer the questions below.

Picture 1

Picture 2

Picture 3

Picture 4

	Picture 1	Picture 2	Picture 3	Picture 4
Which picture most closely represents the number of visitors you would expect to see during a trip to your favorite beach on the Outer Coast?				
Which picture best indicates your preferred number of fellow visitors when visiting your favorite beach on the Outer Coast?				

Which picture contains the maximum number of visitors that you would personally feel to be acceptable at your favorite beach during a visit to the Outer Coast?				
Which visitor density would be a reason for you to decide not to return to a favorite beach on the Outer Coast?				

IMPORTANCE-SATISFACTION

In this section, we are interested in identifying the recreation site information which is important to you, while visiting Washington's Outer Coast for your non-consumptive recreation activities.

IMPORTANCE

Please read each statement and rate the importance of each item as it contributes to an ideal recreation/tourism setting for the non-consumptive recreation activities you did on Washington's Outer Coast. If an item does not apply, indicate by selection n/a (not applicable). Likewise, if you don't know, select (dk).

n/a Not Applicable, dk Don't Know, 1=Not Important, 2=Somewhat Important, 3=Important, 4=Very Important, 5=Extremely Important

1. Clear water (high visibility)

2. Clean water (little to no pollution)

3. Many kinds of fish and sealife to view

4. Opportunity to view large wildlife (whales, dolphins, sharks, seals, sea lions, etc.) from shore

5. Opportunity to view large wildlife (whales, dolphins, sharks, seals, sea lions, etc.) from a boat

6. Ability to see whales from shore

7. Abundance of fish and sealife (healthy populations)

8. Tidal Pools with diverse and heathy populations of organisms

9. Presence of starfish/seastars to see in tidal pools

10. Control of invasive species

11. Cleanliness of beaches & shorelines

12. Natural views unobstructed by development on the water (oil & gas platforms, windmills, etc.)

13. Natural views unobstructed by development on the shore (high rise buildings, industrial facilities, etc.)

14. Parks and specially protected areas

15. Beach and shoreline access

16. Undeveloped campgrounds or areas on beaches suitable for camping

17. Garbage cans/dumpsters at trailheads, other access points and parking lots

18. Historic preservation (historic landmarks, houses, shipwrecks, etc.)

19. Parking

20. Public restrooms at trailheads and campgrounds

21. Uncrowded conditions

22. Handicap accessible beaches

23. Maps, brochures and other tourist information

24. Signage at trailheads, other access points and parking lots with information on types of natural resources one can experience

25. Organization of volunteer efforts to clean beaches & shorelines

SATISFACTION

You just indicated the importance of a list of items to your recreation/tourist experiences. Now please read each of the items on this list and rate how satisfied you were with each of the places you did your activities on the Outer Coast of Washington. If an item does not apply, indicate by selecting n/a (Not Applicable). Likewise, if you don't know, select (dk).

n/a Not Applicable, dk Don't Know, 1=Terrible, 2=Unhappy/Dissatisfied, 3=Mixed, 4=Happy/Satisfied, 5=Delighted

 1. Clear water (high visibility)

2. Clean water (little to no pollution)

3. Many kinds of fish and sealife to view

4. Opportunity to view large wildlife (whales, dolphins, sharks, seals, sea lions, etc.) from shore

5. Opportunity to view large wildlife (whales, dolphins, sharks, seals, sea lions, etc.) from a boat

6. Ability to see whales from shore

7. Abundance of fish and sealife (healthy populations)

8. Tidal Pools with diverse and heathy populations of organisms

9. Presence of starfish/seastars to see in tidal pools

10. Control of invasive species

11. Cleanliness of beaches & shorelines

12. Natural views unobstructed by development on the water (oil & gas platforms, windmills, etc.)

13. Natural views unobstructed by development on the shore (high rise buildings, industrial facilities, etc.)

14. Parks and specially protected areas

15. Beach and shoreline access

16. Undeveloped campgrounds or areas on beaches suitable for camping

17. Garbage cans/dumpsters at trailheads, other access points and parking lots

18. Historic preservation (historic landmarks, houses, shipwrecks, etc.)

19. Parking

20. Public restrooms at trailheads and campgrounds

21. Uncrowded conditions

22. Handicap accessible beaches

23. Maps, brochures and other tourist information

24. Signage at trailheads, other access points and parking lots with information on types of natural resources one can experience

254. Organization of volunteer efforts to clean beaches & shorelines

In this section, you will be asked to choose among alternative sets (bundles) of attribute conditions on Washington's Outer Coast. Much like purchasing a car, you will be presented with different bundles of attribute conditions and each bundle has a price. You will be asked to choose your preferred bundle.

First some information to help you with making your decisions.

If <u>current management practices</u> continue in the future (<u>Status Quo</u>), in 10 to 20 years scientists expect that the conditions of natural resources will be in a poor or declining condition or <u>Low Condition (L)</u>.

If <u>management is changed</u> to improve conditions, it will require both public and private investments to protect and restore the natural resources, which would include enforcement of rules and regulations.

Bundles of conditions are based on the amount of investment and the resulting levels of conditions. Bundles can be mixes of Low (L), Medium (M) and High (H) or Ideal conditions.

There is an estimated cost to your household per year that would be required to achieve each condition.

The <u>cost per year</u> is based on the costs that will be paid by businesses and households to pay for investments that protect and restore the natural resources like improved sewage treatment, filtering and cleaning urban run-off, erosion control from agricultural areas and development projects, installation of mooring buoys to protect bottom habitats from anchor damage, habitat restoration activities, and enforcement of rules and regulations. Businesses will pass on the costs to customers.

The <u>costs per year</u> would be paid by all residents and visitors to the Outer Coast of Washington through increased prices of goods and services. This might also include increases in local sales taxes to cover government costs to pay for protection and restoration or provide facilities and services.

You will be asked to make four choices across nine different bundles, including the <u>Status Quo</u> option.
You will also be asked for each of the four choices, how many days you would visit the Outer Coast <u>per year</u> for each choice you made.

You will also be asked to provide a brief explanation for each choice and how certain you were when making your choice.

The higher the level of conditions, the higher the costs to your household per year.

Remember, if you spend money for one of the bundles, that money won't be available to buy other goods and services. If you don't want to spend more to maintain or improve future conditions on the Outer Coast, then the Status Quo (Low Condition) would be your choice.

NOTE: THERE ARE NINE VERSIONS OF THE CHOICE SETS. VERSIONS SHOULD BE RANDOMLLY ASSIGNED TO PANEL MEMBERS WITH EQUAL NUMBERS PER VERSION.

(See additional document)

We would like to learn more about how you reacted to the questions that asked you to choose between various combinations of conditions at various prices. Please indicate your level of agreement with the following statements

Select one answer for each row in the grid.

1=Strongly Disagree, 2=Disagree, 3=Neither Agree nor Disagree, 4=Agree, 5=Strongly Agree

Costs should not be a factor when protecting the environment.
I found it difficult to select my most preferred choice.
There was not enough information for me to make informed decisions about doing more to protect and restore natural resources or expand and improve facilities and services.
I was concerned the federal, state and local governments cannot effectively manage the natural resources and facilities or provide the services.
I should not have to pay more for maintaining or improving conditions.
The public views as expressed in this survey should be important to government when it chooses how to manage these resources and facilities and the services they provide.
I do not believe the scenarios accurately represent the current or potential states of the environment.

Did the photographs on beach crowding help you in making your decisions about how much you would be willing to pay for different beach conditions?

__ Yes
__ No

Version 1, Choice 1

Attributes	Status Quo	Scenario A	Scenario B
Marine Mammals: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.	**H:** A decrease in number of threatened and endangered and all 11 species removed from species of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.
Seabirds: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**H:** A decrease in the number of threatened and endangered species and no species on list of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.
Opportunity to see large predators such as killer whales, sharks, etc.	**L:** Never seen.	**L:** Never seen.	**M:** Occasionally seen.
Tide Pool Organisms: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**M:** 20 to 40 species with no expected loss of species. Rare species are occasionally seen. Invasive species reduced but are occasionally seen.	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.
Tide Pool Access	**L:** Distance from access point greater than 2 miles.	**H:** Distance form access point is 0.25 miles or less.	**L:** Distance from access point greater than 2 miles.
Clean water (no to low pollutants) to support water-based activities	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with	**M:** 14 to 26 beach closures for a total of108 to 215 days of closure. 6 to 10 beach advisories with 41 to 82 beach days with	**H:** 0 to 13 beach closures for a total of 0 to 107 days of closure. 0 to 5 beach advisories with 0 to 40 beach days with

	advisories. Conditions generally do not meet health standards.	advisories. Conditions mostly meet health standards.	advisories. All conditions meet health standards.
Beach and shoreline quality (absence of debris/garbage)	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**H:** Minimal debris or trash visible on the shore 0.5lbs per 100 feet of shoreline.
Beach and shoreline quality (absence of harmful algal blooms)	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**M:** A few harmful algal blooms causing respiratory distress to beach and shoreline users. 16 to 30 beaches open for razor clam digging per year.	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.
Views not obstructed by onshore or offshore development	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**H:** Low impact of development with no offshore structures and easy access to beaches and shores.	**M:** Limited to low intensity development with views partially obstructed by a few offshore structures. Some access to beaches and shoreline.
Uncrowded by other recreational users	**L:** 21 or more people encountered during a beach visit.	**H:** 0 to 10 people encountered on a beach visit.	**M:** 11 to 20 people encountered on a beach visit.
Cost to your household per year	**$0**	**$80**	**$40**
Your preferred choice (check box)	☐	☐	☐

How many days per year would you visit the Outer Coast for the choice you just made? _____
(Number of days)

Please provide a brief comment that helps us understand why you chose the option you most preferred.

_____
_____
_____
_____
_____
_____

How sure are you of the choice you just made? (Check one)
__ Not sure at all

__ Slightly sure
__ Moderately sure
__ Very sure
__ Extremely sure

Version 1, Choice 2

Attributes	Status Quo	Scenario A	Scenario B
Marine Mammals: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**H:** A decrease in number of threatened and endangered and all 11 species removed from species of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.
Seabirds: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.
Opportunity to see large predators such as killer whales, sharks, etc.	**L:** Never seen.	**M:** Occasionally seen.	**L:** Never seen.
Tide Pool Organisms: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**M:** 20 to 40 species with no expected loss of species. Rare species are occasionally seen. Invasive species reduced but are occasionally seen.	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.
Tide Pool Access	**L:** Distance from access point greater than 2 miles.	**M:** Distance from access point is 0.25 to 2 miles.	**H:** Distance form access point is 0.25 miles or less.
Clean water (no to low pollutants) to support water-based activities	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83	**M:** 14 to 26 beach closures for a total of108 to 215 days of closure. 6 to 10 beach advisories with 41	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83

	to 124 beach days with advisories. Conditions generally do not meet health standards.	to 82 beach days with advisories. Conditions mostly meet health standards.	to 124 beach days with advisories. Conditions generally do not meet health standards.
Beach and shoreline quality (absence of debris/garbage)	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**M:** Moderate amounts of debris or trash visible on the shore 1.6 lbs. per 100 feet of shoreline.
Beach and shoreline quality (absence of harmful algal blooms)	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**M:** A few harmful algal blooms causing respiratory distress to beach and shoreline users. 16 to 30 beaches open for razor clam digging per year.
Views not obstructed by onshore or offshore development	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**H:** Low impact of development with no offshore structures and easy access to beaches and shores.	**M:** Limited to low intensity development with views partially obstructed by a few offshore structures. Some access to beaches and shoreline.
Uncrowded by other recreational users	**L:** 21 or more people encountered during a beach visit.	**H:** 0 to 10 people encountered on a beach visit.	**M:** 11 to 20 people encountered on a beach visit.
Cost to your household per year	**$0**	**$20**	**$40**
Your preferred choice (check box)	☐	☐	☐

How many days per year would you visit the Outer Coast for the choice you just made? _____ (Number of days)

Please provide a brief comment that helps us understand why you chose the option you most preferred.

_____
_____
_____
_____
_____
_____

How sure are you of the choice you just made? (Check one)

__ Not sure at all
__ Slightly sure
__ Moderately sure
__ Very sure
__ Extremely sure

Version 1, Choice 3

Attributes	Status Quo	Scenario A	Scenario B
Marine Mammals: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**H:** A decrease in number of threatened and endangered and all 11 species removed from species of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.
Seabirds: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**H:** A decrease in the number of threatened and endangered species and no species on list of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.
Opportunity to see large predators such as killer whales, sharks, etc.	**L:** Never seen.	**L:** Never seen.	**H:** Commonly seen.
Tide Pool Organisms: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**M:** 20 to 40 species with no expected loss of species. Rare species are occasionally seen. Invasive species reduced but are occasionally seen.	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.
Tide Pool Access	**L:** Distance from access point greater than 2 miles.	**M:** Distance from access point is 0.25 to 2 miles.	**H:** Distance form access point is 0.25 miles or less.
Clean water (no to low pollutants) to support water-based activities	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with	**H:** 0 to 13 beach closures for a total of 0 to 107 days of closure. 0 to 5 beach advisories with 0 to 40 beach days with

	advisories. Conditions generally do not meet health standards.	advisories. Conditions generally do not meet health standards.	advisories. All conditions meet health standards.
Beach and shoreline quality (absence of debris/garbage)	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**H:** Minimal debris or trash visible on the shore 0.5lbs per 100 feet of shoreline.	**M:** Moderate amounts of debris or trash visible on the shore 1.6 lbs. per 100 feet of shoreline.
Beach and shoreline quality (absence of harmful algal blooms)	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**M:** A few harmful algal blooms causing respiratory distress to beach and shoreline users. 16 to 30 beaches open for razor clam digging per year.	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.
Views not obstructed by onshore or offshore development	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**H:** Low impact of development with no offshore structures and easy access to beaches and shores.
Uncrowded by other recreational users	**L:** 21 or more people encountered during a beach visit.	**L:** 21 or more people encountered during a beach visit.	**H:** 0 to 10 people encountered on a beach visit.
Cost to your household per year	**$0**	**$175**	**$350**
Your preferred choice (check box)	☐	☐	☐

How many days per year would you visit the Outer Coast for the choice you just made? _____
(Number of days)

Please provide a brief comment that helps us understand why you chose the option you most preferred.
_____
_____
_____
_____
_____
_____

How sure are you of the choice you just made? (Check one)
__ Not sure at all

__ Slightly sure
__ Moderately sure
__ Very sure
__ Extremely sure

Version 1, Choice 4

Attributes	Status Quo	Scenario A	Scenario B
Marine Mammals: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.
Seabirds: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**H:** A decrease in the number of threatened and endangered species and no species on list of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.
Opportunity to see large predators such as killer whales, sharks, etc.	**L:** Never seen.	**M:** Occasionally seen.	**L:** Never seen.
Tide Pool Organisms: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**H:** Greater than 40 species. Rare species become less rare and more commonly seen. Invasive species are rarely or never seen.
Tide Pool Access	**L:** Distance from access point greater than 2 miles.	**H:** Distance form access point is 0.25 miles or less.	**L:** Distance from access point greater than 2 miles.
Clean water (no to low pollutants) to support water-based activities	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with advisories. Conditions	**H:** 0 to 13 beach closures for a total of 0 to 107 days of closure. 0 to 5 beach advisories with 0 to 40 beach days with advisories. All conditions	**M:** 14 to 26 beach closures for a total of108 to 215 days of closure. 6 to 10 beach advisories with 41 to 82 beach days with advisories. Conditions

	generally do not meet health standards.	meet health standards.	mostly meet health standards.
Beach and shoreline quality (absence of debris/garbage)	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**H:** Minimal debris or trash visible on the shore 0.5lbs per 100 feet of shoreline.	**M:** Moderate amounts of debris or trash visible on the shore 1.6 lbs. per 100 feet of shoreline.
Beach and shoreline quality (absence of harmful algal blooms)	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**M:** A few harmful algal blooms causing respiratory distress to beach and shoreline users. 16 to 30 beaches open for razor clam digging per year.	**H:** No harmful algal blooms causing respiratory distress to beach and shoreline users. 31 to 58 beaches open for razor clam digging per year.
Views not obstructed by onshore or offshore development	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**M:** Limited to low intensity development with views partially obstructed by a few offshore structures. Some access to beaches and shoreline.
Uncrowded by other recreational users	**L:** 21 or more people encountered during a beach visit.	**L:** 21 or more people encountered during a beach visit.	**M:** 11 to 20 people encountered on a beach visit.
Cost to your household per year	**$0**	**$175**	**$80**
Your preferred choice (check box)	☐	☐	☐

How many days per year would you visit the Outer Coast for the choice you just made? _____
(Number of days)

Please provide a brief comment that helps us understand why you chose the option you most preferred.
_____
_____
_____
_____
_____
_____

How sure are you of the choice you just made? (Check one)
__ Not sure at all
__ Slightly sure

__ Moderately sure
__ Very sure
__ Extremely sure

Version 2, Choice 1

Attributes	Status Quo	Scenario A	Scenario B
Marine Mammals: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**H:** A decrease in number of threatened and endangered and all 11 species removed from species of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.
Seabirds: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.	**H:** A decrease in the number of threatened and endangered species and no species on list of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.
Opportunity to see large predators such as killer whales, sharks, etc.	**L:** Never seen.	**M:** Occasionally seen.	**L:** Never seen.
Tide Pool Organisms: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**H:** Greater than 40 species. Rare species become less rare and more commonly seen. Invasive species are rarely or never seen.	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.
Tide Pool Access	**L:** Distance from access point greater than 2 miles.	**L:** Distance from access point greater than 2 miles.	**H:** Distance form access point is 0.25 miles or less.
Clean water (no to low pollutants) to support water-based activities	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with	**H:** 0 to 13 beach closures for a total of 0 to 107 days of closure. 0 to 5 beach advisories with 0 to 40 beach days with	**M:** 14 to 26 beach closures for a total of108 to 215 days of closure. 6 to 10 beach advisories with 41 to 82 beach days with

	advisories. Conditions generally do not meet health standards.	advisories. All conditions meet health standards.	advisories. Conditions mostly meet health standards.
Beach and shoreline quality (absence of debris/garbage)	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**M:** Moderate amounts of debris or trash visible on the shore 1.6 lbs. per 100 feet of shoreline.	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.
Beach and shoreline quality (absence of harmful algal blooms)	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**H:** No harmful algal blooms causing respiratory distress to beach and shoreline users. 31 to 58 beaches open for razor clam digging per year.
Views not obstructed by onshore or offshore development	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**H:** Low impact of development with no offshore structures and easy access to beaches and shores.	**M:** Limited to low intensity development with views partially obstructed by a few offshore structures. Some access to beaches and shoreline.
Uncrowded by other recreational users	**L:** 21 or more people encountered during a beach visit.	**H:** 0 to 10 people encountered on a beach visit.	**M:** 11 to 20 people encountered on a beach visit.
Cost to your household per year	**$0**	**$700**	**$175**
Your preferred choice (check box)	☐	☐	☐

How many days per year would you visit the Outer Coast for the choice you just made? _____
(Number of days)

Please provide a brief comment that helps us understand why you chose the option you most preferred.
_____
_____
_____
_____
_____
_____

How sure are you of the choice you just made? (Check one)
__ Not sure at all

__ Slightly sure
__ Moderately sure
__ Very sure
__ Extremely sure

Version 2, Choice 2

Attributes	Status Quo	Scenario A	Scenario B
Marine Mammals: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.	**H:** A decrease in number of threatened and endangered and all 11 species removed from species of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.
Seabirds: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**H:** A decrease in the number of threatened and endangered species and no species on list of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.
Opportunity to see large predators such as killer whales, sharks, etc.	**L:** Never seen.	**L:** Never seen.	**M:** Occasionally seen.
Tide Pool Organisms: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**H:** Greater than 40 species. Rare species become less rare and more commonly seen. Invasive species are rarely or never seen.	**M:** 20 to 40 species with no expected loss of species. Rare species are occasionally seen. Invasive species reduced but are occasionally seen.
Tide Pool Access	**L:** Distance from access point greater than 2 miles.	**M:** Distance from access point is 0.25 to 2 miles.	**H:** Distance form access point is 0.25 miles or less.
Clean water (no to low pollutants) to support water-based activities	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with	**H:** 0 to 13 beach closures for a total of 0 to 107 days of closure. 0 to 5 beach advisories with 0 to 40 beach days with	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with

	advisories. Conditions generally do not meet health standards.	advisories. All conditions meet health standards.	advisories. Conditions generally do not meet health standards.
Beach and shoreline quality (absence of debris/garbage)	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**H:** Minimal debris or trash visible on the shore 0.5lbs per 100 feet of shoreline.	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.
Beach and shoreline quality (absence of harmful algal blooms)	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**M:** A few harmful algal blooms causing respiratory distress to beach and shoreline users. 16 to 30 beaches open for razor clam digging per year.	**H:** No harmful algal blooms causing respiratory distress to beach and shoreline users. 31 to 58 beaches open for razor clam digging per year.
Views not obstructed by onshore or offshore development	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**H:** Low impact of development with no offshore structures and easy access to beaches and shores.	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.
Uncrowded by other recreational users	**L:** 21 or more people encountered during a beach visit.	**H:** 0 to 10 people encountered on a beach visit.	**L:** 21 or more people encountered during a beach visit.
Cost to your household per year	**$0**	**$700**	**$350**
Your preferred choice (check box)	☐	☐	☐

How many days per year would you visit the Outer Coast for the choice you just made? _____
(Number of days)

Please provide a brief comment that helps us understand why you chose the option you most preferred.
_____
_____
_____
_____
_____
_____

How sure are you of the choice you just made? (Check one)
__ Not sure at all

__ Slightly sure
__ Moderately sure
__ Very sure
__ Extremely sure

Version 2, Choice 3

Attributes	Status Quo	Scenario A	Scenario B
Marine Mammals: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**H:** A decrease in number of threatened and endangered and all 11 species removed from species of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.
Seabirds: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.
Opportunity to see large predators such as killer whales, sharks, etc.	**L:** Never seen.	**M:** Occasionally seen.	**L:** Never seen.
Tide Pool Organisms: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**M:** 20 to 40 species with no expected loss of species. Rare species are occasionally seen. Invasive species reduced but are occasionally seen.
Tide Pool Access	**L:** Distance from access point greater than 2 miles.	**H:** Distance form access point is 0.25 miles or less.	**M:** Distance from access point is 0.25 to 2 miles.
Clean water (no to low pollutants) to support water-based activities	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with	**H:** 0 to 13 beach closures for a total of 0 to 107 days of closure. 0 to 5 beach advisories with 0 to 40 beach days with

	advisories. Conditions generally do not meet health standards.	advisories. Conditions generally do not meet health standards.	advisories. All conditions meet health standards.
Beach and shoreline quality (absence of debris/garbage)	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**M:** Moderate amounts of debris or trash visible on the shore 1.6 lbs. per 100 feet of shoreline.	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.
Beach and shoreline quality (absence of harmful algal blooms)	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**H:** No harmful algal blooms causing respiratory distress to beach and shoreline users. 31 to 58 beaches open for razor clam digging per year.	**M:** A few harmful algal blooms causing respiratory distress to beach and shoreline users. 16 to 30 beaches open for razor clam digging per year.
Views not obstructed by onshore or offshore development	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**M:** Limited to low intensity development with views partially obstructed by a few offshore structures. Some access to beaches and shoreline.	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.
Uncrowded by other recreational users	**L:** 21 or more people encountered during a beach visit.	**M:** 11 to 20 people encountered on a beach visit.	**L:** 21 or more people encountered during a beach visit.
Cost to your household per year	**$0**	**$350**	**$175**
Your preferred choice (check box)	☐	☐	☐

How many days per year would you visit the Outer Coast for the choice you just made? _____ (Number of days)

Please provide a brief comment that helps us understand why you chose the option you most preferred.
_____ _____
_____ _____
_____ _____

How sure are you of the choice you just made? (Check one)
__ Not sure at all

__ Slightly sure
__ Moderately sure
__ Very sure
__ Extremely sure

Version 2, Choice 4

Attributes	Status Quo	Scenario A	Scenario B
Marine Mammals: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.
Seabirds: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**H:** A decrease in the number of threatened and endangered species and no species on list of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.
Opportunity to see large predators such as killer whales, sharks, etc.	**L:** Never seen.	**M:** Occasionally seen.	**H:** Commonly seen.
Tide Pool Organisms: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**M:** 20 to 40 species with no expected loss of species. Rare species are occasionally seen. Invasive species reduced but are occasionally seen.
Tide Pool Access	**L:** Distance from access point greater than 2 miles.	**H:** Distance form access point is 0.25 miles or less.	**L:** Distance from access point greater than 2 miles.
Clean water (no to low pollutants) to support water-based activities	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with advisories. Conditions	**H:** 0 to 13 beach closures for a total of 0 to 107 days of closure. 0 to 5 beach advisories with 0 to 40 beach days with advisories. All conditions	**M:** 14 to 26 beach closures for a total of108 to 215 days of closure. 6 to 10 beach advisories with 41 to 82 beach days with advisories. Conditions

	generally do not meet health standards.	meet health standards.	mostly meet health standards.
Beach and shoreline quality (absence of debris/garbage)	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**M:** Moderate amounts of debris or trash visible on the shore 1.6 lbs. per 100 feet of shoreline.	**H:** Minimal debris or trash visible on the shore 0.5lbs per 100 feet of shoreline.
Beach and shoreline quality (absence of harmful algal blooms)	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**H:** No harmful algal blooms causing respiratory distress to beach and shoreline users. 31 to 58 beaches open for razor clam digging per year.
Views not obstructed by onshore or offshore development	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**H:** Low impact of development with no offshore structures and easy access to beaches and shores.	**M:** Limited to low intensity development with views partially obstructed by a few offshore structures. Some access to beaches and shoreline.
Uncrowded by other recreational users	**L:** 21 or more people encountered during a beach visit.	**H:** 0 to 10 people encountered on a beach visit.	**M:** 11 to 20 people encountered on a beach visit.
Cost to your household per year	**$0**	**$350**	**$700**
Your preferred choice (check box)	☐	☐	☐

How many days per year would you visit the Outer Coast for the choice you just made? _____
(Number of days)

Please provide a brief comment that helps us understand why you chose the option you most preferred.

_____
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_____

How sure are you of the choice you just made? (Check one)
__ Not sure at all
__ Slightly sure

__ Moderately sure
__ Very sure
__ Extremely sure

Version 3, Choice 1

Attributes	Status Quo	Scenario A	Scenario B
Marine Mammals: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.	**H:** A decrease in number of threatened and endangered and all 11 species removed from species of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.
Seabirds: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.	**H:** A decrease in the number of threatened and endangered species and no species on list of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.
Opportunity to see large predators such as killer whales, sharks, etc.	**L:** Never seen.	**L:** Never seen.	**H:** Commonly seen.
Tide Pool Organisms: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**M:** 20 to 40 species with no expected loss of species. Rare species are occasionally seen. Invasive species reduced but are occasionally seen.	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.
Tide Pool Access	**L:** Distance from access point greater than 2 miles.	**H:** Distance form access point is 0.25 miles or less.	**M:** Distance from access point is 0.25 to 2 miles.
Clean water (no to low pollutants) to support water-based activities	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with	**M:** 14 to 26 beach closures for a total of108 to 215 days of closure. 6 to 10 beach advisories with 41 to 82 beach days with

	advisories. Conditions generally do not meet health standards.	advisories. Conditions generally do not meet health standards.	advisories. Conditions mostly meet health standards.
Beach and shoreline quality (absence of debris/garbage)	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**M:** Moderate amounts of debris or trash visible on the shore 1.6 lbs. per 100 feet of shoreline.	**H:** Minimal debris or trash visible on the shore 0.5lbs per 100 feet of shoreline.
Beach and shoreline quality (absence of harmful algal blooms)	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**M:** A few harmful algal blooms causing respiratory distress to beach and shoreline users. 16 to 30 beaches open for razor clam digging per year.	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.
Views not obstructed by onshore or offshore development	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**H:** Low impact of development with no offshore structures and easy access to beaches and shores.	**M:** Limited to low intensity development with views partially obstructed by a few offshore structures. Some access to beaches and shoreline.
Uncrowded by other recreational users	**L:** 21 or more people encountered during a beach visit.	**H:** 0 to 10 people encountered on a beach visit.	**M:** 11 to 20 people encountered on a beach visit.
Cost to your household per year	**$0**	**$175**	**$80**
Your preferred choice (check box)	☐	☐	☐

How many days per year would you visit the Outer Coast for the choice you just made? _____
(Number of days)

Please provide a brief comment that helps us understand why you chose the option you most preferred.
_____
_____
_____
_____
_____
_____

How sure are you of the choice you just made? (Check one)
__ Not sure at all

__ Slightly sure
__ Moderately sure
__ Very sure
__ Extremely sure

Version 3, Choice 2

Attributes	Status Quo	Scenario A	Scenario B
Marine Mammals: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**H:** A decrease in number of threatened and endangered and all 11 species removed from species of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.
Seabirds: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.	**H:** A decrease in the number of threatened and endangered species and no species on list of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.
Opportunity to see large predators such as killer whales, sharks, etc.	**L:** Never seen.	**M:** Occasionally seen.	**H:** Commonly seen.
Tide Pool Organisms: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**M:** 20 to 40 species with no expected loss of species. Rare species are occasionally seen. Invasive species reduced but are occasionally seen.	**H:** Greater than 40 species. Rare species become less rare and more commonly seen. Invasive species are rarely or never seen.
Tide Pool Access	**L:** Distance from access point greater than 2 miles.	**L:** Distance from access point greater than 2 miles.	**M:** Distance from access point is 0.25 to 2 miles.
Clean water (no to low pollutants) to support water-based activities	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with	**H:** 0 to 13 beach closures for a total of 0 to 107 days of closure. 0 to 5 beach advisories with 0 to 40 beach days with	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with

	advisories. Conditions generally do not meet health standards.	advisories. All conditions meet health standards.	advisories. Conditions generally do not meet health standards.
Beach and shoreline quality (absence of debris/garbage)	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**H:** Minimal debris or trash visible on the shore 0.5lbs per 100 feet of shoreline.	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.
Beach and shoreline quality (absence of harmful algal blooms)	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**H:** No harmful algal blooms causing respiratory distress to beach and shoreline users. 31 to 58 beaches open for razor clam digging per year.
Views not obstructed by onshore or offshore development	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**M:** Limited to low intensity development with views partially obstructed by a few offshore structures. Some access to beaches and shoreline.	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.
Uncrowded by other recreational users	**L:** 21 or more people encountered during a beach visit.	**M:** 11 to 20 people encountered on a beach visit.	**L:** 21 or more people encountered during a beach visit.
Cost to your household per year	**$0**	**$175**	**$350**
Your preferred choice (check box)	☐	☐	☐

How many days per year would you visit the Outer Coast for the choice you just made? _____
(Number of days)

Please provide a brief comment that helps us understand why you chose the option you most preferred.
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How sure are you of the choice you just made? (Check one)
__ Not sure at all

__ Slightly sure
__ Moderately sure
__ Very sure
__ Extremely sure

Version 3, Choice 3

Attributes	Status Quo	Scenario A	Scenario B
Marine Mammals: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**H:** A decrease in number of threatened and endangered and all 11 species removed from species of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.
Seabirds: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**H:** A decrease in the number of threatened and endangered species and no species on list of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.
Opportunity to see large predators such as killer whales, sharks, etc.	**L:** Never seen.	**M:** Occasionally seen.	**H:** Commonly seen.
Tide Pool Organisms: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**M:** 20 to 40 species with no expected loss of species. Rare species are occasionally seen. Invasive species reduced but are occasionally seen.	**H:** Greater than 40 species. Rare species become less rare and more commonly seen. Invasive species are rarely or never seen.
Tide Pool Access	**L:** Distance from access point greater than 2 miles.	**M:** Distance from access point is 0.25 to 2 miles.	**H:** Distance form access point is 0.25 miles or less.
Clean water (no to low pollutants) to support water-based activities	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with	**M:** 14 to 26 beach closures for a total of108 to 215 days of closure. 6 to 10 beach advisories with 41 to 82 beach days with

	advisories. Conditions generally do not meet health standards.	advisories. Conditions generally do not meet health standards.	advisories. Conditions mostly meet health standards.
Beach and shoreline quality (absence of debris/garbage)	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**H:** Minimal debris or trash visible on the shore 0.5lbs per 100 feet of shoreline.	**M:** Moderate amounts of debris or trash visible on the shore 1.6 lbs. per 100 feet of shoreline.
Beach and shoreline quality (absence of harmful algal blooms)	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**M:** A few harmful algal blooms causing respiratory distress to beach and shoreline users. 16 to 30 beaches open for razor clam digging per year.	**H:** No harmful algal blooms causing respiratory distress to beach and shoreline users. 31 to 58 beaches open for razor clam digging per year.
Views not obstructed by onshore or offshore development	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**M:** Limited to low intensity development with views partially obstructed by a few offshore structures. Some access to beaches and shoreline.	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.
Uncrowded by other recreational users	**L:** 21 or more people encountered during a beach visit.	**M:** 11 to 20 people encountered on a beach visit.	**L:** 21 or more people encountered during a beach visit.
Cost to your household per year	**$0**	**$350**	**$175**
Your preferred choice (check box)	☐	☐	☐

How many days per year would you visit the Outer Coast for the choice you just made? _____ (Number of days)

Please provide a brief comment that helps us understand why you chose the option you most preferred.
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How sure are you of the choice you just made? (Check one)
__ Not sure at all

__ Slightly sure
__ Moderately sure
__ Very sure
__ Extremely sure

Version 3, Choice 4

Attributes	Status Quo	Scenario A	Scenario B
Marine Mammals: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.
Seabirds: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**H:** A decrease in the number of threatened and endangered species and no species on list of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.
Opportunity to see large predators such as killer whales, sharks, etc.	**L:** Never seen.	**M:** Occasionally seen.	**H:** Commonly seen.
Tide Pool Organisms: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**M:** 20 to 40 species with no expected loss of species. Rare species are occasionally seen. Invasive species reduced but are occasionally seen.	**H:** Greater than 40 species. Rare species become less rare and more commonly seen. Invasive species are rarely or never seen.
Tide Pool Access	**L:** Distance from access point greater than 2 miles.	**M:** Distance from access point is 0.25 to 2 miles.	**L:** Distance from access point greater than 2 miles.
Clean water (no to low pollutants) to support water-based activities	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with advisories. Conditions	**M:** 14 to 26 beach closures for a total of108 to 215 days of closure. 6 to 10 beach advisories with 41 to 82 beach days with advisories. Conditions	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with advisories. Conditions

	generally do not meet health standards.	mostly meet health standards.	generally do not meet health standards.
Beach and shoreline quality (absence of debris/garbage)	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**H:** Minimal debris or trash visible on the shore 0.5lbs per 100 feet of shoreline.	**M:** Moderate amounts of debris or trash visible on the shore 1.6 lbs. per 100 feet of shoreline.
Beach and shoreline quality (absence of harmful algal blooms)	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**H:** No harmful algal blooms causing respiratory distress to beach and shoreline users. 31 to 58 beaches open for razor clam digging per year.	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.
Views not obstructed by onshore or offshore development	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**M:** Limited to low intensity development with views partially obstructed by a few offshore structures. Some access to beaches and shoreline.
Uncrowded by other recreational users	**L:** 21 or more people encountered during a beach visit.	**L:** 21 or more people encountered during a beach visit.	**M:** 11 to 20 people encountered on a beach visit.
Cost to your household per year	**$0**	**$20**	**$80**
Your preferred choice (check box)	☐	☐	☐

How many days per year would you visit the Outer Coast for the choice you just made? _____
(Number of days)

Please provide a brief comment that helps us understand why you chose the option you most preferred.
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How sure are you of the choice you just made? (Check one)
__ Not sure at all
__ Slightly sure

__ Moderately sure
__ Very sure
__ Extremely sure

Version 4, Choice 1

Attributes	Status Quo	Scenario A	Scenario B
Marine Mammals: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**H:** A decrease in number of threatened and endangered and all 11 species removed from species of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.
Seabirds: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**H:** A decrease in the number of threatened and endangered species and no species on list of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.
Opportunity to see large predators such as killer whales, sharks, etc.	**L:** Never seen.	**L:** Never seen.	**H:** Commonly seen.
Tide Pool Organisms: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**M:** 20 to 40 species with no expected loss of species. Rare species are occasionally seen. Invasive species reduced but are occasionally seen.	**H:** Greater than 40 species. Rare species become less rare and more commonly seen. Invasive species are rarely or never seen.
Tide Pool Access	**L:** Distance from access point greater than 2 miles.	**M:** Distance from access point is 0.25 to 2 miles.	**L:** Distance from access point greater than 2 miles.
Clean water (no to low pollutants)	**L:** 27 to 40 beach closures for a total of 216 to 323	**L:** 27 to 40 beach closures for a total of 216 to 323	**M:** 14 to 26 beach closures for a total of108

to support water-based activities	days of closure. 11 to 15 beach advisories with 83 to 124 beach days with advisories. Conditions generally do not meet health standards.	days of closure. 11 to 15 beach advisories with 83 to 124 beach days with advisories. Conditions generally do not meet health standards.	to 215 days of closure. 6 to 10 beach advisories with 41 to 82 beach days with advisories. Conditions mostly meet health standards.
Beach and shoreline quality (absence of debris/garbage)	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**M:** Moderate amounts of debris or trash visible on the shore 1.6 lbs. per 100 feet of shoreline.	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.
Beach and shoreline quality (absence of harmful algal blooms)	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**H:** No harmful algal blooms causing respiratory distress to beach and shoreline users. 31 to 58 beaches open for razor clam digging per year.	**M:** A few harmful algal blooms causing respiratory distress to beach and shoreline users. 16 to 30 beaches open for razor clam digging per year.
Views not obstructed by onshore or offshore development	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**H:** Low impact of development with no offshore structures and easy access to beaches and shores.	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.
Uncrowded by other recreational users	**L:** 21 or more people encountered during a beach visit.	**H:** 0 to 10 people encountered on a beach visit.	**L:** 21 or more people encountered during a beach visit.
Cost to your household per year	**$0**	**$80**	**$40**
Your preferred choice (check box)	☐	☐	☐

How many days per year would you visit the Outer Coast for the choice you just made? _____
(Number of days)

Please provide a brief comment that helps us understand why you chose the option you most preferred.

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How sure are you of the choice you just made? (Check one)
__ Not sure at all
__ Slightly sure
__ Moderately sure
__ Very sure
__ Extremely sure

Version 4, Choice 2

Attributes	Status Quo	Scenario A	Scenario B
Marine Mammals: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.
Seabirds: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**H:** A decrease in the number of threatened and endangered species and no species on list of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.
Opportunity to see large predators such as killer whales, sharks, etc.	**L:** Never seen.	**H:** Commonly seen.	**L:** Never seen.
Tide Pool Organisms: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**M:** 20 to 40 species with no expected loss of species. Rare species are occasionally seen. Invasive species reduced but are occasionally seen.
Tide Pool Access	**L:** Distance from access point greater than 2 miles.	**M:** Distance from access point is 0.25 to 2 miles.	**H:** Distance form access point is 0.25 miles or less.
Clean water (no to low pollutants)	**L:** 27 to 40 beach closures for a total of 216 to 323	**L:** 27 to 40 beach closures for a total of 216 to 323	**M:** 14 to 26 beach closures for a total of108

to support water-based activities	days of closure. 11 to 15 beach advisories with 83 to 124 beach days with advisories. Conditions generally do not meet health standards.	days of closure. 11 to 15 beach advisories with 83 to 124 beach days with advisories. Conditions generally do not meet health standards.	to 215 days of closure. 6 to 10 beach advisories with 41 to 82 beach days with advisories. Conditions mostly meet health standards.
Beach and shoreline quality (absence of debris/garbage)	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**H:** Minimal debris or trash visible on the shore 0.5lbs per 100 feet of shoreline.	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.
Beach and shoreline quality (absence of harmful algal blooms)	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**H:** No harmful algal blooms causing respiratory distress to beach and shoreline users. 31 to 58 beaches open for razor clam digging per year.	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.
Views not obstructed by onshore or offshore development	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**M:** Limited to low intensity development with views partially obstructed by a few offshore structures. Some access to beaches and shoreline.	**H:** Low impact of development with no offshore structures and easy access to beaches and shores.
Uncrowded by other recreational users	**L:** 21 or more people encountered during a beach visit.	**M:** 11 to 20 people encountered on a beach visit.	**H:** 0 to 10 people encountered on a beach visit.
Cost to your household per year	**$0**	**$20**	**$40**
Your preferred choice (check box)	☐	☐	☐

How many days per year would you visit the Outer Coast for the choice you just made? _____ (Number of days)

Please provide a brief comment that helps us understand why you chose the option you most preferred.

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How sure are you of the choice you just made? (Check one)
__ Not sure at all
__ Slightly sure
__ Moderately sure
__ Very sure
__ Extremely sure

Version 4, Choice 3

Attributes	Status Quo	Scenario A	Scenario B
Marine Mammals: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**H:** A decrease in number of threatened and endangered and all 11 species removed from species of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.
Seabirds: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**H:** A decrease in the number of threatened and endangered species and no species on list of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.
Opportunity to see large predators such as killer whales, sharks, etc.	**L:** Never seen.	**M:** Occasionally seen.	**H:** Commonly seen.
Tide Pool Organisms: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**M:** 20 to 40 species with no expected loss of species. Rare species are occasionally seen. Invasive species reduced but are occasionally seen.
Tide Pool Access	**L:** Distance from access point greater than 2 miles.	**L:** Distance from access point greater than 2 miles.	**H:** Distance form access point is 0.25 miles or less.
Clean water (no to low pollutants)	**L:** 27 to 40 beach closures for a total of 216 to 323	**M:** 14 to 26 beach closures for a total of108	**L:** 27 to 40 beach closures for a total of 216 to 323

to support water-based activities	days of closure. 11 to 15 beach advisories with 83 to 124 beach days with advisories. Conditions generally do not meet health standards.	to 215 days of closure. 6 to 10 beach advisories with 41 to 82 beach days with advisories. Conditions mostly meet health standards.	days of closure. 11 to 15 beach advisories with 83 to 124 beach days with advisories. Conditions generally do not meet health standards.
Beach and shoreline quality (absence of debris/garbage)	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**M:** Moderate amounts of debris or trash visible on the shore 1.6 lbs. per 100 feet of shoreline.	**H:** Minimal debris or trash visible on the shore 0.5lbs per 100 feet of shoreline.
Beach and shoreline quality (absence of harmful algal blooms)	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**M:** A few harmful algal blooms causing respiratory distress to beach and shoreline users. 16 to 30 beaches open for razor clam digging per year.	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.
Views not obstructed by onshore or offshore development	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**H:** Low impact of development with no offshore structures and easy access to beaches and shores.
Uncrowded by other recreational users	**L:** 21 or more people encountered during a beach visit.	**L:** 21 or more people encountered during a beach visit.	**H:** 0 to 10 people encountered on a beach visit.
Cost to your household per year	**$0**	**$40**	**$80**
Your preferred choice (check box)	☐	☐	☐

How many days per year would you visit the Outer Coast for the choice you just made? _____
(Number of days)

Please provide a brief comment that helps us understand why you chose the option you most preferred.

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How sure are you of the choice you just made? (Check one)
__ Not sure at all
__ Slightly sure
__ Moderately sure
__ Very sure
__ Extremely sure

Version 4, Choice 4

Attributes	Status Quo	Scenario A	Scenario B
Marine Mammals: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.
Seabirds: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**H:** A decrease in the number of threatened and endangered species and no species on list of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.
Opportunity to see large predators such as killer whales, sharks, etc.	**L:** Never seen.	**M:** Occasionally seen.	**H:** Commonly seen.
Tide Pool Organisms: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**H:** Greater than 40 species. Rare species become less rare and more commonly seen. Invasive species are rarely or never seen.	**M:** 20 to 40 species with no expected loss of species. Rare species are occasionally seen. Invasive species reduced but are occasionally seen.
Tide Pool Access	**L:** Distance from access point greater than 2 miles.	**M:** Distance from access point is 0.25 to 2 miles.	**L:** Distance from access point greater than 2 miles.
Clean water (no to low pollutants)	**L:** 27 to 40 beach closures for a total of 216 to 323	**H:** 0 to 13 beach closures for a total of 0 to 107 days	**M:** 14 to 26 beach closures for a total of108

to support water-based activities	days of closure. 11 to 15 beach advisories with 83 to 124 beach days with advisories. Conditions generally do not meet health standards.	of closure. 0 to 5 beach advisories with 0 to 40 beach days with advisories. All conditions meet health standards.	to 215 days of closure. 6 to 10 beach advisories with 41 to 82 beach days with advisories. Conditions mostly meet health standards.
Beach and shoreline quality (absence of debris/garbage)	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**M:** Moderate amounts of debris or trash visible on the shore 1.6 lbs. per 100 feet of shoreline.
Beach and shoreline quality (absence of harmful algal blooms)	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**H:** No harmful algal blooms causing respiratory distress to beach and shoreline users. 31 to 58 beaches open for razor clam digging per year.	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.
Views not obstructed by onshore or offshore development	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**M:** Limited to low intensity development with views partially obstructed by a few offshore structures. Some access to beaches and shoreline.	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.
Uncrowded by other recreational users	**L:** 21 or more people encountered during a beach visit.	**M:** 11 to 20 people encountered on a beach visit.	**L:** 21 or more people encountered during a beach visit.
Cost to your household per year	**$0**	**$40**	**$20**
Your preferred choice (check box)	☐	☐	☐

How many days per year would you visit the Outer Coast for the choice you just made? _____ (Number of days)

Please provide a brief comment that helps us understand why you chose the option you most preferred.

_____ _____
_____ _____

_____
_____

How sure are you of the choice you just made? (Check one)
__ Not sure at all
__ Slightly sure
__ Moderately sure
__ Very sure
__ Extremely sure

Version 5, Choice 1

Attributes	Status Quo	Scenario A	Scenario B
Marine Mammals: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**H:** A decrease in number of threatened and endangered and all 11 species removed from species of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.
Seabirds: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**H:** A decrease in the number of threatened and endangered species and no species on list of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.
Opportunity to see large predators such as killer whales, sharks, etc.	**L:** Never seen.	**L:** Never seen.	**H:** Commonly seen.
Tide Pool Organisms: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**M:** 20 to 40 species with no expected loss of species. Rare species are occasionally seen. Invasive species reduced but are occasionally seen.
Tide Pool Access	**L:** Distance from access point greater than 2 miles.	**L:** Distance from access point greater than 2 miles.	**H:** Distance form access point is 0.25 miles or less.
Clean water (no to low pollutants)	**L:** 27 to 40 beach closures for a total of 216 to 323	**M:** 14 to 26 beach closures for a total of108	**H:** 0 to 13 beach closures for a total of 0 to 107 days

to support water-based activities	days of closure. 11 to 15 beach advisories with 83 to 124 beach days with advisories. Conditions generally do not meet health standards.	to 215 days of closure. 6 to 10 beach advisories with 41 to 82 beach days with advisories. Conditions mostly meet health standards.	of closure. 0 to 5 beach advisories with 0 to 40 beach days with advisories. All conditions meet health standards.
Beach and shoreline quality (absence of debris/garbage)	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**H:** Minimal debris or trash visible on the shore 0.5lbs per 100 feet of shoreline.	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.
Beach and shoreline quality (absence of harmful algal blooms)	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**H:** No harmful algal blooms causing respiratory distress to beach and shoreline users. 31 to 58 beaches open for razor clam digging per year.	**M:** A few harmful algal blooms causing respiratory distress to beach and shoreline users. 16 to 30 beaches open for razor clam digging per year.
Views not obstructed by onshore or offshore development	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**H:** Low impact of development with no offshore structures and easy access to beaches and shores.	**M:** Limited to low intensity development with views partially obstructed by a few offshore structures. Some access to beaches and shoreline.
Uncrowded by other recreational users	**L:** 21 or more people encountered during a beach visit.	**H:** 0 to 10 people encountered on a beach visit.	**M:** 11 to 20 people encountered on a beach visit.
Cost to your household per year	**$0**	**$175**	**$350**
Your preferred choice (check box)	☐	☐	☐

How many days per year would you visit the Outer Coast for the choice you just made? _____ (Number of days)

Please provide a brief comment that helps us understand why you chose the option you most preferred.

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How sure are you of the choice you just made? (Check one)
__ Not sure at all
__ Slightly sure
__ Moderately sure
__ Very sure
__ Extremely sure

Version 5, Choice 2

Attributes	Status Quo	Scenario A	Scenario B
Marine Mammals: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.	**H:** A decrease in number of threatened and endangered and all 11 species removed from species of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.
Seabirds: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**H:** A decrease in the number of threatened and endangered species and no species on list of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.
Opportunity to see large predators such as killer whales, sharks, etc.	**L:** Never seen.	**M:** Occasionally seen.	**H:** Commonly seen.
Tide Pool Organisms: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**M:** 20 to 40 species with no expected loss of species. Rare species are occasionally seen. Invasive species reduced but are occasionally seen.	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.
Tide Pool Access	**L:** Distance from access point greater than 2 miles.	**H:** Distance form access point is 0.25 miles or less.	**L:** Distance from access point greater than 2 miles.
Clean water (no to low pollutants)	**L:** 27 to 40 beach closures for a total of 216 to 323	**H:** 0 to 13 beach closures for a total of 0 to 107 days	**L:** 27 to 40 beach closures for a total of 216 to 323

to support water-based activities	days of closure. 11 to 15 beach advisories with 83 to 124 beach days with advisories. Conditions generally do not meet health standards.	of closure. 0 to 5 beach advisories with 0 to 40 beach days with advisories. All conditions meet health standards.	days of closure. 11 to 15 beach advisories with 83 to 124 beach days with advisories. Conditions generally do not meet health standards.
Beach and shoreline quality (absence of debris/garbage)	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**M:** Moderate amounts of debris or trash visible on the shore 1.6 lbs. per 100 feet of shoreline.	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.
Beach and shoreline quality (absence of harmful algal blooms)	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**H:** No harmful algal blooms causing respiratory distress to beach and shoreline users. 31 to 58 beaches open for razor clam digging per year.	**M:** A few harmful algal blooms causing respiratory distress to beach and shoreline users. 16 to 30 beaches open for razor clam digging per year.
Views not obstructed by onshore or offshore development	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**H:** Low impact of development with no offshore structures and easy access to beaches and shores.
Uncrowded by other recreational users	**L:** 21 or more people encountered during a beach visit.	**L:** 21 or more people encountered during a beach visit.	**H:** 0 to 10 people encountered on a beach visit.
Cost to your household per year	**$0**	**$700**	**$175**
Your preferred choice (check box)	▢	▢	▢

How many days per year would you visit the Outer Coast for the choice you just made? _____ (Number of days)

Please provide a brief comment that helps us understand why you chose the option you most preferred.

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How sure are you of the choice you just made? (Check one)
__ Not sure at all
__ Slightly sure
__ Moderately sure
__ Very sure
__ Extremely sure

Version 5, Choice 3

Attributes	Status Quo	Scenario A	Scenario B
Marine Mammals: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.	**H:** A decrease in number of threatened and endangered and all 11 species removed from species of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.
Seabirds: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.
Opportunity to see large predators such as killer whales, sharks, etc.	**L:** Never seen.	**M:** Occasionally seen.	**H:** Commonly seen.
Tide Pool Organisms: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**H:** Greater than 40 species. Rare species become less rare and more commonly seen. Invasive species are rarely or never seen.
Tide Pool Access	**L:** Distance from access point greater than 2 miles.	**M:** Distance from access point is 0.25 to 2 miles.	**L:** Distance from access point greater than 2 miles.
Clean water (no to low pollutants)	**L:** 27 to 40 beach closures for a total of 216 to 323	**M:** 14 to 26 beach closures for a total of108	**H:** 0 to 13 beach closures for a total of 0 to 107 days

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to support water-based activities	days of closure. 11 to 15 beach advisories with 83 to 124 beach days with advisories. Conditions generally do not meet health standards.	to 215 days of closure. 6 to 10 beach advisories with 41 to 82 beach days with advisories. Conditions mostly meet health standards.	of closure. 0 to 5 beach advisories with 0 to 40 beach days with advisories. All conditions meet health standards.
Beach and shoreline quality (absence of debris/garbage)	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**M:** Moderate amounts of debris or trash visible on the shore 1.6 lbs. per 100 feet of shoreline.
Beach and shoreline quality (absence of harmful algal blooms)	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**M:** A few harmful algal blooms causing respiratory distress to beach and shoreline users. 16 to 30 beaches open for razor clam digging per year.
Views not obstructed by onshore or offshore development	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**H:** Low impact of development with no offshore structures and easy access to beaches and shores.	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.
Uncrowded by other recreational users	**L:** 21 or more people encountered during a beach visit.	**H:** 0 to 10 people encountered on a beach visit.	**L:** 21 or more people encountered during a beach visit.
Cost to your household per year	**$0**	**$175**	**$80**
Your preferred choice (check box)	☐	☐	☐

How many days per year would you visit the Outer Coast for the choice you just made? _____
(Number of days)

Please provide a brief comment that helps us understand why you chose the option you most preferred.

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How sure are you of the choice you just made? (Check one)
__ Not sure at all
__ Slightly sure
__ Moderately sure
__ Very sure
__ Extremely sure

Version 5, Choice 4

Attributes	Status Quo	Scenario A	Scenario B
Marine Mammals: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.
Seabirds: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.
Opportunity to see large predators such as killer whales, sharks, etc.	**L:** Never seen.	**M:** Occasionally seen.	**H:** Commonly seen.
Tide Pool Organisms: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**H:** Greater than 40 species. Rare species become less rare and more commonly seen. Invasive species are rarely or never seen.	**M:** 20 to 40 species with no expected loss of species. Rare species are occasionally seen. Invasive species reduced but are occasionally seen.
Tide Pool Access	**L:** Distance from access point greater than 2 miles.	**L:** Distance from access point greater than 2 miles.	**M:** Distance from access point is 0.25 to 2 miles.
Clean water (no to low pollutants)	**L:** 27 to 40 beach closures for a total of 216 to 323	**M:** 14 to 26 beach closures for a total of108	**H:** 0 to 13 beach closures for a total of 0 to 107 days

to support water-based activities	days of closure. 11 to 15 beach advisories with 83 to 124 beach days with advisories. Conditions generally do not meet health standards.	to 215 days of closure. 6 to 10 beach advisories with 41 to 82 beach days with advisories. Conditions mostly meet health standards.	of closure. 0 to 5 beach advisories with 0 to 40 beach days with advisories. All conditions meet health standards.
Beach and shoreline quality (absence of debris/garbage)	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**H:** Minimal debris or trash visible on the shore 0.5lbs per 100 feet of shoreline.	**M:** Moderate amounts of debris or trash visible on the shore 1.6 lbs. per 100 feet of shoreline.
Beach and shoreline quality (absence of harmful algal blooms)	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**H:** No harmful algal blooms causing respiratory distress to beach and shoreline users. 31 to 58 beaches open for razor clam digging per year.
Views not obstructed by onshore or offshore development	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**H:** Low impact of development with no offshore structures and easy access to beaches and shores.	**M:** Limited to low intensity development with views partially obstructed by a few offshore structures. Some access to beaches and shoreline.
Uncrowded by other recreational users	**L:** 21 or more people encountered during a beach visit.	**H:** 0 to 10 people encountered on a beach visit.	**M:** 11 to 20 people encountered on a beach visit.
Cost to your household per year	**$0**	**$350**	**$700**
Your preferred choice (check box)	☐	☐	☐

How many days per year would you visit the Outer Coast for the choice you just made? _____ (Number of days)

Please provide a brief comment that helps us understand why you chose the option you most preferred.

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How sure are you of the choice you just made? (Check one)
__ Not sure at all
__ Slightly sure
__ Moderately sure
__ Very sure
__ Extremely sure

Version 6, Choice 1

Attributes	Status Quo	Scenario A	Scenario B
Marine Mammals: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.
Seabirds: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.
Opportunity to see large predators such as killer whales, sharks, etc.	**L:** Never seen.	**H:** Commonly seen.	**L:** Never seen.
Tide Pool Organisms: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**H:** Greater than 40 species. Rare species become less rare and more commonly seen. Invasive species are rarely or never seen.	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.
Tide Pool Access	**L:** Distance from access point greater than 2 miles.	**M:** Distance from access point is 0.25 to 2 miles.	**H:** Distance form access point is 0.25 miles or less.
Clean water (no to low pollutants)	**L:** 27 to 40 beach closures for a total of 216 to 323	**H:** 0 to 13 beach closures for a total of 0 to 107 days	**M:** 14 to 26 beach closures for a total of108

to support water-based activities	days of closure. 11 to 15 beach advisories with 83 to 124 beach days with advisories. Conditions generally do not meet health standards.	of closure. 0 to 5 beach advisories with 0 to 40 beach days with advisories. All conditions meet health standards.	to 215 days of closure. 6 to 10 beach advisories with 41 to 82 beach days with advisories. Conditions mostly meet health standards.
Beach and shoreline quality (absence of debris/garbage)	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**M:** Moderate amounts of debris or trash visible on the shore 1.6 lbs. per 100 feet of shoreline.
Beach and shoreline quality (absence of harmful algal blooms)	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**H:** No harmful algal blooms causing respiratory distress to beach and shoreline users. 31 to 58 beaches open for razor clam digging per year.	**M:** A few harmful algal blooms causing respiratory distress to beach and shoreline users. 16 to 30 beaches open for razor clam digging per year.
Views not obstructed by onshore or offshore development	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**H:** Low impact of development with no offshore structures and easy access to beaches and shores.	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.
Uncrowded by other recreational users	**L:** 21 or more people encountered during a beach visit.	**H:** 0 to 10 people encountered on a beach visit.	**L:** 21 or more people encountered during a beach visit.
Cost to your household per year	**$0**	**$40**	**$80**
Your preferred choice (check box)	☐	☐	☐

How many days per year would you visit the Outer Coast for the choice you just made? _____ (Number of days)

Please provide a brief comment that helps us understand why you chose the option you most preferred.

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_____ _____

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How sure are you of the choice you just made? (Check one)
__ Not sure at all
__ Slightly sure
__ Moderately sure
__ Very sure
__ Extremely sure

Version 6, Choice 2

Attributes	Status Quo	Scenario A	Scenario B
Marine Mammals: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.
Seabirds: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.
Opportunity to see large predators such as killer whales, sharks, etc.	**L:** Never seen.	**M:** Occasionally seen.	**H:** Commonly seen.
Tide Pool Organisms: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**H:** Greater than 40 species. Rare species become less rare and more commonly seen. Invasive species are rarely or never seen.
Tide Pool Access	**L:** Distance from access point greater than 2 miles.	**H:** Distance form access point is 0.25 miles or less.	**M:** Distance from access point is 0.25 to 2 miles.
Clean water (no to low pollutants)	**L:** 27 to 40 beach closures for a total of 216 to 323	**H:** 0 to 13 beach closures for a total of 0 to 107 days	**M:** 14 to 26 beach closures for a total of108

to support water-based activities	days of closure. 11 to 15 beach advisories with 83 to 124 beach days with advisories. Conditions generally do not meet health standards.	of closure. 0 to 5 beach advisories with 0 to 40 beach days with advisories. All conditions meet health standards.	to 215 days of closure. 6 to 10 beach advisories with 41 to 82 beach days with advisories. Conditions mostly meet health standards.
Beach and shoreline quality (absence of debris/garbage)	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**M:** Moderate amounts of debris or trash visible on the shore 1.6 lbs. per 100 feet of shoreline.
Beach and shoreline quality (absence of harmful algal blooms)	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**M:** A few harmful algal blooms causing respiratory distress to beach and shoreline users. 16 to 30 beaches open for razor clam digging per year.	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.
Views not obstructed by onshore or offshore development	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**M:** Limited to low intensity development with views partially obstructed by a few offshore structures. Some access to beaches and shoreline.	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.
Uncrowded by other recreational users	**L:** 21 or more people encountered during a beach visit.	**M:** 11 to 20 people encountered on a beach visit.	**L:** 21 or more people encountered during a beach visit.
Cost to your household per year	**$0**	**$80**	**$175**
Your preferred choice (check box)	☐	☐	☐

How many days per year would you visit the Outer Coast for the choice you just made? _____ (Number of days)

Please provide a brief comment that helps us understand why you chose the option you most preferred.

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How sure are you of the choice you just made? (Check one)
__ Not sure at all
__ Slightly sure
__ Moderately sure
__ Very sure
__ Extremely sure

Version 6, Choice 3

Attributes	Status Quo	Scenario A	Scenario B
Marine Mammals: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**H:** A decrease in number of threatened and endangered and all 11 species removed from species of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.
Seabirds: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**H:** A decrease in the number of threatened and endangered species and no species on list of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.
Opportunity to see large predators such as killer whales, sharks, etc.	**L:** Never seen.	**M:** Occasionally seen.	**L:** Never seen.
Tide Pool Organisms: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**H:** Greater than 40 species. Rare species become less rare and more commonly seen. Invasive species are rarely or never seen.
Tide Pool Access	**L:** Distance from access point greater than 2 miles.	**M:** Distance from access point is 0.25 to 2 miles.	**H:** Distance form access point is 0.25 miles or less.
Clean water (no to low pollutants)	**L:** 27 to 40 beach closures for a total of 216 to 323	**M:** 14 to 26 beach closures for a total of108	**L:** 27 to 40 beach closures for a total of 216 to 323

to support water-based activities	days of closure. 11 to 15 beach advisories with 83 to 124 beach days with advisories. Conditions generally do not meet health standards.	to 215 days of closure. 6 to 10 beach advisories with 41 to 82 beach days with advisories. Conditions mostly meet health standards.	days of closure. 11 to 15 beach advisories with 83 to 124 beach days with advisories. Conditions generally do not meet health standards.
Beach and shoreline quality (absence of debris/garbage)	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**M:** Moderate amounts of debris or trash visible on the shore 1.6 lbs. per 100 feet of shoreline.	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.
Beach and shoreline quality (absence of harmful algal blooms)	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**M:** A few harmful algal blooms causing respiratory distress to beach and shoreline users. 16 to 30 beaches open for razor clam digging per year.	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.
Views not obstructed by onshore or offshore development	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**M:** Limited to low intensity development with views partially obstructed by a few offshore structures. Some access to beaches and shoreline.
Uncrowded by other recreational users	**L:** 21 or more people encountered during a beach visit.	**L:** 21 or more people encountered during a beach visit.	**M:** 11 to 20 people encountered on a beach visit.
Cost to your household per year	**$0**	**$80**	**$20**
Your preferred choice (check box)	☐	☐	☐

How many days per year would you visit the Outer Coast for the choice you just made? _____
(Number of days)

Please provide a brief comment that helps us understand why you chose the option you most preferred.

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How sure are you of the choice you just made? (Check one)
__ Not sure at all
__ Slightly sure
__ Moderately sure
__ Very sure
__ Extremely sure

Version 6, Choice 4

Attributes	Status Quo	Scenario A	Scenario B
Marine Mammals: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**H:** A decrease in number of threatened and endangered and all 11 species removed from species of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.
Seabirds: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.
Opportunity to see large predators such as killer whales, sharks, etc.	**L:** Never seen.	**L:** Never seen.	**M:** Occasionally seen.
Tide Pool Organisms: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**H:** Greater than 40 species. Rare species become less rare and more commonly seen. Invasive species are rarely or never seen.
Tide Pool Access	**L:** Distance from access point greater than 2 miles.	**M:** Distance from access point is 0.25 to 2 miles.	**L:** Distance from access point greater than 2 miles.
Clean water (no to low pollutants)	**L:** 27 to 40 beach closures for a total of 216 to 323	**M:** 14 to 26 beach closures for a total of108	**L:** 27 to 40 beach closures for a total of 216 to 323

to support water-based activities	days of closure. 11 to 15 beach advisories with 83 to 124 beach days with advisories. Conditions generally do not meet health standards.	to 215 days of closure. 6 to 10 beach advisories with 41 to 82 beach days with advisories. Conditions mostly meet health standards.	days of closure. 11 to 15 beach advisories with 83 to 124 beach days with advisories. Conditions generally do not meet health standards.
Beach and shoreline quality (absence of debris/garbage)	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**M:** Moderate amounts of debris or trash visible on the shore 1.6 lbs. per 100 feet of shoreline.	**H:** Minimal debris or trash visible on the shore 0.5lbs per 100 feet of shoreline.
Beach and shoreline quality (absence of harmful algal blooms)	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**H:** No harmful algal blooms causing respiratory distress to beach and shoreline users. 31 to 58 beaches open for razor clam digging per year.
Views not obstructed by onshore or offshore development	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**M:** Limited to low intensity development with views partially obstructed by a few offshore structures. Some access to beaches and shoreline.	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.
Uncrowded by other recreational users	**L:** 21 or more people encountered during a beach visit.	**M:** 11 to 20 people encountered on a beach visit.	**L:** 21 or more people encountered during a beach visit.
Cost to your household per year	**$0**	**$40**	**$80**
Your preferred choice (check box)	☐	☐	☐

How many days per year would you visit the Outer Coast for the choice you just made? _____ (Number of days)

Please provide a brief comment that helps us understand why you chose the option you most preferred.

_____ _____

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_____

How sure are you of the choice you just made? (Check one)
__ Not sure at all
__ Slightly sure
__ Moderately sure
__ Very sure
__ Extremely sure

Version 7, Choice 1

Attributes	Status Quo	Scenario A	Scenario B
Marine Mammals: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**H:** A decrease in number of threatened and endangered and all 11 species removed from species of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.
Seabirds: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.	**H:** A decrease in the number of threatened and endangered species and no species on list of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.
Opportunity to see large predators such as killer whales, sharks, etc.	**L:** Never seen.	**H:** Commonly seen.	**L:** Never seen.
Tide Pool Organisms: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**H:** Greater than 40 species. Rare species become less rare and more commonly seen. Invasive species are rarely or never seen.
Tide Pool Access	**L:** Distance from access point greater than 2 miles.	**H:** Distance form access point is 0.25 miles or less.	**M:** Distance from access point is 0.25 to 2 miles.
Clean water (no to low pollutants) to support water-based activities	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with	**M:** 14 to 26 beach closures for a total of108 to 215 days of closure. 6 to 10 beach advisories with 41 to 82 beach days with	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with

	advisories. Conditions generally do not meet health standards.	advisories. Conditions mostly meet health standards.	advisories. Conditions generally do not meet health standards.
Beach and shoreline quality (absence of debris/garbage)	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**H:** Minimal debris or trash visible on the shore 0.5lbs per 100 feet of shoreline.	**M:** Moderate amounts of debris or trash visible on the shore 1.6 lbs. per 100 feet of shoreline.
Beach and shoreline quality (absence of harmful algal blooms)	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**H:** No harmful algal blooms causing respiratory distress to beach and shoreline users. 31 to 58 beaches open for razor clam digging per year.	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.
Views not obstructed by onshore or offshore development	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**H:** Low impact of development with no offshore structures and easy access to beaches and shores.	**M:** Limited to low intensity development with views partially obstructed by a few offshore structures. Some access to beaches and shoreline.
Uncrowded by other recreational users	**L:** 21 or more people encountered during a beach visit.	**H:** 0 to 10 people encountered on a beach visit.	**M:** 11 to 20 people encountered on a beach visit.
Cost to your household per year	**$0**	**$700**	**$350**
Your preferred choice (check box)	☐	☐	☐

How many days per year would you visit the Outer Coast for the choice you just made? _____ (Number of days)

Please provide a brief comment that helps us understand why you chose the option you most preferred.

_____ _____
_____ _____
_____ _____

How sure are you of the choice you just made? (Check one)
__ Not sure at all

__ Slightly sure
__ Moderately sure
__ Very sure
__ Extremely sure

Version 7, Choice 2

Attributes	Status Quo	Scenario A	Scenario B
Marine Mammals: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**H:** A decrease in number of threatened and endangered and all 11 species removed from species of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.
Seabirds: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**H:** A decrease in the number of threatened and endangered species and no species on list of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.
Opportunity to see large predators such as killer whales, sharks, etc.	**L:** Never seen.	**L:** Never seen.	**M:** Occasionally seen.
Tide Pool Organisms: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**M:** 20 to 40 species with no expected loss of species. Rare species are occasionally seen. Invasive species reduced but are occasionally seen.	**H:** Greater than 40 species. Rare species become less rare and more commonly seen. Invasive species are rarely or never seen.
Tide Pool Access	**L:** Distance from access point greater than 2 miles.	**L:** Distance from access point greater than 2 miles.	**H:** Distance form access point is 0.25 miles or less.
Clean water (no to low pollutants) to support water-based activities	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with	**H:** 0 to 13 beach closures for a total of 0 to 107 days of closure. 0 to 5 beach advisories with 0 to 40 beach days with	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with

	advisories. Conditions generally do not meet health standards.	advisories. All conditions meet health standards.	advisories. Conditions generally do not meet health standards.
Beach and shoreline quality (absence of debris/garbage)	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**M:** Moderate amounts of debris or trash visible on the shore 1.6 lbs. per 100 feet of shoreline.	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.
Beach and shoreline quality (absence of harmful algal blooms)	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**H:** No harmful algal blooms causing respiratory distress to beach and shoreline users. 31 to 58 beaches open for razor clam digging per year.
Views not obstructed by onshore or offshore development	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**H:** Low impact of development with no offshore structures and easy access to beaches and shores.
Uncrowded by other recreational users	**L:** 21 or more people encountered during a beach visit.	**L:** 21 or more people encountered during a beach visit.	**H:** 0 to 10 people encountered on a beach visit.
Cost to your household per year	**$0**	**$350**	**$175**
Your preferred choice (check box)	☐	☐	☐

How many days per year would you visit the Outer Coast for the choice you just made? _____
(Number of days)

Please provide a brief comment that helps us understand why you chose the option you most preferred.
_____
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_____
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_____

How sure are you of the choice you just made? (Check one)
__ Not sure at all

__ Slightly sure
__ Moderately sure
__ Very sure
__ Extremely sure

Version 7, Choice 3

Attributes	Status Quo	Scenario A	Scenario B
Marine Mammals: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**H:** A decrease in number of threatened and endangered and all 11 species removed from species of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.
Seabirds: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**H:** A decrease in the number of threatened and endangered species and no species on list of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.
Opportunity to see large predators such as killer whales, sharks, etc.	**L:** Never seen.	**H:** Commonly seen.	**L:** Never seen.
Tide Pool Organisms: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**M:** 20 to 40 species with no expected loss of species. Rare species are occasionally seen. Invasive species reduced but are occasionally seen.	**H:** Greater than 40 species. Rare species become less rare and more commonly seen. Invasive species are rarely or never seen.
Tide Pool Access	**L:** Distance from access point greater than 2 miles.	**L:** Distance from access point greater than 2 miles.	**H:** Distance form access point is 0.25 miles or less.
Clean water (no to low pollutants) to support water-based activities	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with	**H:** 0 to 13 beach closures for a total of 0 to 107 days of closure. 0 to 5 beach advisories with 0 to 40 beach days with

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	advisories. Conditions generally do not meet health standards.	advisories. Conditions generally do not meet health standards.	advisories. All conditions meet health standards.
Beach and shoreline quality (absence of debris/garbage)	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**M:** Moderate amounts of debris or trash visible on the shore 1.6 lbs. per 100 feet of shoreline.	**H:** Minimal debris or trash visible on the shore 0.5lbs per 100 feet of shoreline.
Beach and shoreline quality (absence of harmful algal blooms)	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**H:** No harmful algal blooms causing respiratory distress to beach and shoreline users. 31 to 58 beaches open for razor clam digging per year.	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.
Views not obstructed by onshore or offshore development	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**H:** Low impact of development with no offshore structures and easy access to beaches and shores.	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.
Uncrowded by other recreational users	**L:** 21 or more people encountered during a beach visit.	**H:** 0 to 10 people encountered on a beach visit.	**L:** 21 or more people encountered during a beach visit.
Cost to your household per year	**$0**	**$175**	**$80**
Your preferred choice (check box)	☐	☐	☐

How many days per year would you visit the Outer Coast for the choice you just made? _____ (Number of days)

Please provide a brief comment that helps us understand why you chose the option you most preferred.

_____ _____
_____ _____
_____ _____

How sure are you of the choice you just made? (Check one)
__ Not sure at all

__ Slightly sure
__ Moderately sure
__ Very sure
__ Extremely sure

Version 7, Choice 4

Attributes	Status Quo	Scenario A	Scenario B
Marine Mammals: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**H:** A decrease in number of threatened and endangered and all 11 species removed from species of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.
Seabirds: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.	**H:** A decrease in the number of threatened and endangered species and no species on list of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.
Opportunity to see large predators such as killer whales, sharks, etc.	**L:** Never seen.	**M:** Occasionally seen.	**H:** Commonly seen.
Tide Pool Organisms: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**H:** Greater than 40 species. Rare species become less rare and more commonly seen. Invasive species are rarely or never seen.	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.
Tide Pool Access	**L:** Distance from access point greater than 2 miles.	**M:** Distance from access point is 0.25 to 2 miles.	**L:** Distance from access point greater than 2 miles.
Clean water (no to low pollutants) to support water-based activities	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with	**H:** 0 to 13 beach closures for a total of 0 to 107 days of closure. 0 to 5 beach advisories with 0 to 40 beach days with

	advisories. Conditions generally do not meet health standards.	advisories. Conditions generally do not meet health standards.	advisories. All conditions meet health standards.
Beach and shoreline quality (absence of debris/garbage)	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**H:** Minimal debris or trash visible on the shore 0.5lbs per 100 feet of shoreline.	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.
Beach and shoreline quality (absence of harmful algal blooms)	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**M:** A few harmful algal blooms causing respiratory distress to beach and shoreline users. 16 to 30 beaches open for razor clam digging per year.
Views not obstructed by onshore or offshore development	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**M:** Limited to low intensity development with views partially obstructed by a few offshore structures. Some access to beaches and shoreline.	**H:** Low impact of development with no offshore structures and easy access to beaches and shores.
Uncrowded by other recreational users	**L:** 21 or more people encountered during a beach visit.	**M:** 11 to 20 people encountered on a beach visit.	**H:** 0 to 10 people encountered on a beach visit.
Cost to your household per year	**$0**	**$40**	**$20**
Your preferred choice (check box)	☐	☐	☐

How many days per year would you visit the Outer Coast for the choice you just made? _____
(Number of days)

Please provide a brief comment that helps us understand why you chose the option you most preferred.
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_____
_____
_____
_____
_____

How sure are you of the choice you just made? (Check one)
__ Not sure at all

__ Slightly sure
__ Moderately sure
__ Very sure
__ Extremely sure

Version 8, Choice 1

Attributes	Status Quo	Scenario A	Scenario B
Marine Mammals: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.	**H:** A decrease in number of threatened and endangered and all 11 species removed from species of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.
Seabirds: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.
Opportunity to see large predators such as killer whales, sharks, etc.	**L:** Never seen.	**H:** Commonly seen.	**M:** Occasionally seen.
Tide Pool Organisms: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**H:** Greater than 40 species. Rare species become less rare and more commonly seen. Invasive species are rarely or never seen.
Tide Pool Access	**L:** Distance from access point greater than 2 miles.	**M:** Distance from access point is 0.25 to 2 miles.	**L:** Distance from access point greater than 2 miles.
Clean water (no to low pollutants) to support water-based activities	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with	**H:** 0 to 13 beach closures for a total of 0 to 107 days of closure. 0 to 5 beach advisories with 0 to 40 beach days with

	advisories. Conditions generally do not meet health standards.	advisories. Conditions generally do not meet health standards.	advisories. All conditions meet health standards.
Beach and shoreline quality (absence of debris/garbage)	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**H:** Minimal debris or trash visible on the shore 0.5lbs per 100 feet of shoreline.	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.
Beach and shoreline quality (absence of harmful algal blooms)	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**H:** No harmful algal blooms causing respiratory distress to beach and shoreline users. 31 to 58 beaches open for razor clam digging per year.
Views not obstructed by onshore or offshore development	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**H:** Low impact of development with no offshore structures and easy access to beaches and shores.	**M:** Limited to low intensity development with views partially obstructed by a few offshore structures. Some access to beaches and shoreline.
Uncrowded by other recreational users	**L:** 21 or more people encountered during a beach visit.	**H:** 0 to 10 people encountered on a beach visit.	**M:** 11 to 20 people encountered on a beach visit.
Cost to your household per year	**$0**	**$350**	**$175**
Your preferred choice (check box)	☐	☐	☐

How many days per year would you visit the Outer Coast for the choice you just made? _____
(Number of days)

Please provide a brief comment that helps us understand why you chose the option you most preferred.
_____
_____
_____
_____
_____
_____

How sure are you of the choice you just made? (Check one)
__ Not sure at all

__ Slightly sure
__ Moderately sure
__ Very sure
__ Extremely sure

Version 8, Choice 2

Attributes	Status Quo	Scenario A	Scenario B
Marine Mammals: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.	**H:** A decrease in number of threatened and endangered and all 11 species removed from species of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.
Seabirds: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.
Opportunity to see large predators such as killer whales, sharks, etc.	**L:** Never seen.	**L:** Never seen.	**M:** Occasionally seen.
Tide Pool Organisms: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**M:** 20 to 40 species with no expected loss of species. Rare species are occasionally seen. Invasive species reduced but are occasionally seen.	**H:** Greater than 40 species. Rare species become less rare and more commonly seen. Invasive species are rarely or never seen.
Tide Pool Access	**L:** Distance from access point greater than 2 miles.	**L:** Distance from access point greater than 2 miles.	**M:** Distance from access point is 0.25 to 2 miles.
Clean water (no to low pollutants) to support water-based activities	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with	**H:** 0 to 13 beach closures for a total of 0 to 107 days of closure. 0 to 5 beach advisories with 0 to 40 beach days with	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with

	advisories. Conditions generally do not meet health standards.	advisories. All conditions meet health standards.	advisories. Conditions generally do not meet health standards.
Beach and shoreline quality (absence of debris/garbage)	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**H:** Minimal debris or trash visible on the shore 0.5lbs per 100 feet of shoreline.	**M:** Moderate amounts of debris or trash visible on the shore 1.6 lbs. per 100 feet of shoreline.
Beach and shoreline quality (absence of harmful algal blooms)	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**H:** No harmful algal blooms causing respiratory distress to beach and shoreline users. 31 to 58 beaches open for razor clam digging per year.	**M:** A few harmful algal blooms causing respiratory distress to beach and shoreline users. 16 to 30 beaches open for razor clam digging per year.
Views not obstructed by onshore or offshore development	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**M:** Limited to low intensity development with views partially obstructed by a few offshore structures. Some access to beaches and shoreline.	**H:** Low impact of development with no offshore structures and easy access to beaches and shores.
Uncrowded by other recreational users	**L:** 21 or more people encountered during a beach visit.	**M:** 11 to 20 people encountered on a beach visit.	**H:** 0 to 10 people encountered on a beach visit.
Cost to your household per year	**$0**	**$350**	**$700**
Your preferred choice (check box)	☐	☐	☐

How many days per year would you visit the Outer Coast for the choice you just made? _____
(Number of days)

Please provide a brief comment that helps us understand why you chose the option you most preferred.
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How sure are you of the choice you just made? (Check one)
__ Not sure at all

__ Slightly sure
__ Moderately sure
__ Very sure
__ Extremely sure

Attributes	Status Quo	Scenario A	Scenario B
Marine Mammals: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.
Seabirds: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**H:** A decrease in the number of threatened and endangered species and no species on list of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.
Opportunity to see large predators such as killer whales, sharks, etc.	**L:** Never seen.	**L:** Never seen.	**M:** Occasionally seen.
Tide Pool Organisms: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**M:** 20 to 40 species with no expected loss of species. Rare species are occasionally seen. Invasive species reduced but are occasionally seen.
Tide Pool Access	**L:** Distance from access point greater than 2 miles.	**M:** Distance from access point is 0.25 to 2 miles.	**H:** Distance form access point is 0.25 miles or less.
Clean water (no to low pollutants) to support water-based activities	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with advisories. Conditions	**H:** 0 to 13 beach closures for a total of 0 to 107 days of closure. 0 to 5 beach advisories with 0 to 40 beach days with advisories. All conditions	**M:** 14 to 26 beach closures for a total of108 to 215 days of closure. 6 to 10 beach advisories with 41 to 82 beach days with advisories. Conditions

	generally do not meet health standards.	meet health standards.	mostly meet health standards.
Beach and shoreline quality (absence of debris/garbage)	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**H:** Minimal debris or trash visible on the shore 0.5lbs per 100 feet of shoreline.	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.
Beach and shoreline quality (absence of harmful algal blooms)	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**M:** A few harmful algal blooms causing respiratory distress to beach and shoreline users. 16 to 30 beaches open for razor clam digging per year.	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.
Views not obstructed by onshore or offshore development	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**H:** Low impact of development with no offshore structures and easy access to beaches and shores.	**M:** Limited to low intensity development with views partially obstructed by a few offshore structures. Some access to beaches and shoreline.
Uncrowded by other recreational users	**L:** 21 or more people encountered during a beach visit.	**H:** 0 to 10 people encountered on a beach visit.	**M:** 11 to 20 people encountered on a beach visit.
Cost to your household per year	**$0**	**$350**	**$700**
Your preferred choice (check box)	☐	☐	☐

How many days per year would you visit the Outer Coast for the choice you just made? _____
(Number of days)

Please provide a brief comment that helps us understand why you chose the option you most preferred.
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How sure are you of the choice you just made? (Check one)
__ Not sure at all
__ Slightly sure

__ Moderately sure
__ Very sure
__ Extremely sure

Version 8, Choice 4

Attributes	Status Quo	Scenario A	Scenario B
Marine Mammals: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**H:** A decrease in number of threatened and endangered and all 11 species removed from species of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.
Seabirds: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.
Opportunity to see large predators such as killer whales, sharks, etc.	**L:** Never seen.	**H:** Commonly seen.	**M:** Occasionally seen.
Tide Pool Organisms: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**M:** 20 to 40 species with no expected loss of species. Rare species are occasionally seen. Invasive species reduced but are occasionally seen.	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.
Tide Pool Access	**L:** Distance from access point greater than 2 miles.	**H:** Distance form access point is 0.25 miles or less.	**M:** Distance from access point is 0.25 to 2 miles.
Clean water (no to low pollutants) to support water-based activities	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with	**M:** 14 to 26 beach closures for a total of108 to 215 days of closure. 6 to 10 beach advisories with 41 to 82 beach days with	**H:** 0 to 13 beach closures for a total of 0 to 107 days of closure. 0 to 5 beach advisories with 0 to 40 beach days with

	advisories. Conditions generally do not meet health standards.	advisories. Conditions mostly meet health standards.	advisories. All conditions meet health standards.
Beach and shoreline quality (absence of debris/garbage)	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**H:** Minimal debris or trash visible on the shore 0.5lbs per 100 feet of shoreline.	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.
Beach and shoreline quality (absence of harmful algal blooms)	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**M:** A few harmful algal blooms causing respiratory distress to beach and shoreline users. 16 to 30 beaches open for razor clam digging per year.	**H:** No harmful algal blooms causing respiratory distress to beach and shoreline users. 31 to 58 beaches open for razor clam digging per year.
Views not obstructed by onshore or offshore development	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**H:** Low impact of development with no offshore structures and easy access to beaches and shores.	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.
Uncrowded by other recreational users	**L:** 21 or more people encountered during a beach visit.	**H:** 0 to 10 people encountered on a beach visit.	**L:** 21 or more people encountered during a beach visit.
Cost to your household per year	**$0**	**$700**	**$350**
Your preferred choice (check box)	☐	☐	☐

How many days per year would you visit the Outer Coast for the choice you just made? _____
(Number of days)

Please provide a brief comment that helps us understand why you chose the option you most preferred.
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How sure are you of the choice you just made? (Check one)
__ Not sure at all

__ Slightly sure
__ Moderately sure
__ Very sure
__ Extremely sure

Version 9, Choice 1

Attributes	Status Quo	Scenario A	Scenario B
Marine Mammals: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.
Seabirds: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.
Opportunity to see large predators such as killer whales, sharks, etc.	**L:** Never seen.	**L:** Never seen.	**H:** Commonly seen.
Tide Pool Organisms: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**H:** Greater than 40 species. Rare species become less rare and more commonly seen. Invasive species are rarely or never seen.	**M:** 20 to 40 species with no expected loss of species. Rare species are occasionally seen. Invasive species reduced but are occasionally seen.
Tide Pool Access	**L:** Distance from access point greater than 2 miles.	**M:** Distance from access point is 0.25 to 2 miles.	**H:** Distance form access point is 0.25 miles or less.
Clean water (no to low pollutants) to support water-based activities	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with advisories. Conditions	**M:** 14 to 26 beach closures for a total of108 to 215 days of closure. 6 to 10 beach advisories with 41 to 82 beach days with advisories. Conditions	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with advisories. Conditions

	generally do not meet health standards.	mostly meet health standards.	generally do not meet health standards.
Beach and shoreline quality (absence of debris/garbage)	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**H:** Minimal debris or trash visible on the shore 0.5lbs per 100 feet of shoreline.
Beach and shoreline quality (absence of harmful algal blooms)	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**M:** A few harmful algal blooms causing respiratory distress to beach and shoreline users. 16 to 30 beaches open for razor clam digging per year.	**H:** No harmful algal blooms causing respiratory distress to beach and shoreline users. 31 to 58 beaches open for razor clam digging per year.
Views not obstructed by onshore or offshore development	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**M:** Limited to low intensity development with views partially obstructed by a few offshore structures. Some access to beaches and shoreline.	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.
Uncrowded by other recreational users	**L:** 21 or more people encountered during a beach visit.	**M:** 11 to 20 people encountered on a beach visit.	**L:** 21 or more people encountered during a beach visit.
Cost to your household per year	**$0**	**$80**	**$40**
Your preferred choice (check box)	☐	☐	☐

How many days per year would you visit the Outer Coast for the choice you just made? _____
(Number of days)

Please provide a brief comment that helps us understand why you chose the option you most preferred.

_____
_____
_____
_____
_____
_____

How sure are you of the choice you just made? (Check one)
__ Not sure at all
__ Slightly sure

__ Moderately sure
__ Very sure
__ Extremely sure

Version 9, Choice 2

Attributes	Status Quo	Scenario A	Scenario B
Marine Mammals: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**H:** A decrease in number of threatened and endangered and all 11 species removed from species of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.
Seabirds: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.	**H:** A decrease in the number of threatened and endangered species and no species on list of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.
Opportunity to see large predators such as killer whales, sharks, etc.	**L:** Never seen.	**L:** Never seen.	**M:** Occasionally seen.
Tide Pool Organisms: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**H:** Greater than 40 species. Rare species become less rare and more commonly seen. Invasive species are rarely or never seen.	**M:** 20 to 40 species with no expected loss of species. Rare species are occasionally seen. Invasive species reduced but are occasionally seen.
Tide Pool Access	**L:** Distance from access point greater than 2 miles.	**H:** Distance form access point is 0.25 miles or less.	**L:** Distance from access point greater than 2 miles.
Clean water (no to low pollutants) to support water-based activities	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with	**H:** 0 to 13 beach closures for a total of 0 to 107 days of closure. 0 to 5 beach advisories with 0 to 40 beach days with	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with

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	advisories. Conditions generally do not meet health standards.	advisories. All conditions meet health standards.	advisories. Conditions generally do not meet health standards.
Beach and shoreline quality (absence of debris/garbage)	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**H:** Minimal debris or trash visible on the shore 0.5lbs per 100 feet of shoreline.	**M:** Moderate amounts of debris or trash visible on the shore 1.6 lbs. per 100 feet of shoreline.
Beach and shoreline quality (absence of harmful algal blooms)	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**H:** No harmful algal blooms causing respiratory distress to beach and shoreline users. 31 to 58 beaches open for razor clam digging per year.	**M:** A few harmful algal blooms causing respiratory distress to beach and shoreline users. 16 to 30 beaches open for razor clam digging per year.
Views not obstructed by onshore or offshore development	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**M:** Limited to low intensity development with views partially obstructed by a few offshore structures. Some access to beaches and shoreline.
Uncrowded by other recreational users	**L:** 21 or more people encountered during a beach visit.	**L:** 21 or more people encountered during a beach visit.	**M:** 11 to 20 people encountered on a beach visit.
Cost to your household per year	**$0**	**$175**	**$80**
Your preferred choice (check box)	☐	☐	☐

How many days per year would you visit the Outer Coast for the choice you just made? _____ (Number of days)

Please provide a brief comment that helps us understand why you chose the option you most preferred.
_____ _____
_____ _____
_____ _____

How sure are you of the choice you just made? (Check one)
__ Not sure at all

__ Slightly sure
__ Moderately sure
__ Very sure
__ Extremely sure

Version 9, Choice 3

Attributes	Status Quo	Scenario A	Scenario B
Marine Mammals: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.
Seabirds: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.
Opportunity to see large predators such as killer whales, sharks, etc.	**L:** Never seen.	**L:** Never seen.	**H:** Commonly seen.
Tide Pool Organisms: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**M:** 20 to 40 species with no expected loss of species. Rare species are occasionally seen. Invasive species reduced but are occasionally seen.	**H:** Greater than 40 species. Rare species become less rare and more commonly seen. Invasive species are rarely or never seen.
Tide Pool Access	**L:** Distance from access point greater than 2 miles.	**L:** Distance from access point greater than 2 miles.	**H:** Distance form access point is 0.25 miles or less.
Clean water (no to low pollutants) to support water-based activities	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with advisories. Conditions	**H:** 0 to 13 beach closures for a total of 0 to 107 days of closure. 0 to 5 beach advisories with 0 to 40 beach days with advisories. All conditions	**M:** 14 to 26 beach closures for a total of108 to 215 days of closure. 6 to 10 beach advisories with 41 to 82 beach days with advisories. Conditions

	generally do not meet health standards.	meet health standards.	mostly meet health standards.
Beach and shoreline quality (absence of debris/garbage)	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**H:** Minimal debris or trash visible on the shore 0.5lbs per 100 feet of shoreline.
Beach and shoreline quality (absence of harmful algal blooms)	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**H:** No harmful algal blooms causing respiratory distress to beach and shoreline users. 31 to 58 beaches open for razor clam digging per year.	**M:** A few harmful algal blooms causing respiratory distress to beach and shoreline users. 16 to 30 beaches open for razor clam digging per year.
Views not obstructed by onshore or offshore development	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**H:** Low impact of development with no offshore structures and easy access to beaches and shores.	**M:** Limited to low intensity development with views partially obstructed by a few offshore structures. Some access to beaches and shoreline.
Uncrowded by other recreational users	**L:** 21 or more people encountered during a beach visit.	**H:** 0 to 10 people encountered on a beach visit.	**M:** 11 to 20 people encountered on a beach visit.
Cost to your household per year	**$0**	**$80**	**$175**
Your preferred choice (check box)	☐	☐	☐

How many days per year would you visit the Outer Coast for the choice you just made? _____
(Number of days)

Please provide a brief comment that helps us understand why you chose the option you most preferred.
_____
_____
_____
_____
_____
_____

How sure are you of the choice you just made? (Check one)
__ Not sure at all
__ Slightly sure

__ Moderately sure
__ Very sure
__ Extremely sure

Version 9, Choice 4

Attributes	Status Quo	Scenario A	Scenario B
Marine Mammals: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.	**H:** A decrease in number of threatened and endangered and all 11 species removed from species of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.	**L:** Currently 29 species; 8 endangered or threatened; 11 on list of species of concern; Expect future loss in number of species. Rare species never seen. Populations affected by human disturbances to the point of declining and unsustainable populations.
Seabirds: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** Currently 19 species nest here and many more migrate through the area;5 endangered or threatened; 9 on list of species of concern; Expect future loss in number of species. Populations affected by human disturbances to the point of declining and unsustainable populations.	**M:** No increase in threatened and endangered species or loss of species. Rare species occasionally seen. Human disturbances reduced with half of the populations of all species with stable and sustainable populations.	**H:** A decrease in the number of threatened and endangered species and no species on list of concern. Rare species become less rare and more commonly seen. Human disturbances reduced to the point with all species with sustainable populations.
Opportunity to see large predators such as killer whales, sharks, etc.	**L:** Never seen.	**H:** Commonly seen.	**L:** Never seen.
Tide Pool Organisms: Number of different kinds (diversity) and Abundance (healthy, sustainable populations)	**L:** 10 to 20 species. Expect significant loss of species. Rare species never seen. Invasive species common.	**M:** 20 to 40 species with no expected loss of species. Rare species are occasionally seen. Invasive species reduced but are occasionally seen.	**H:** Greater than 40 species. Rare species become less rare and more commonly seen. Invasive species are rarely or never seen.
Tide Pool Access	**L:** Distance from access point greater than 2 miles.	**M:** Distance from access point is 0.25 to 2 miles.	**L:** Distance from access point greater than 2 miles.
Clean water (no to low pollutants) to support water-based activities	**L:** 27 to 40 beach closures for a total of 216 to 323 days of closure. 11 to 15 beach advisories with 83 to 124 beach days with	**H:** 0 to 13 beach closures for a total of 0 to 107 days of closure. 0 to 5 beach advisories with 0 to 40 beach days with	**M:** 14 to 26 beach closures for a total of108 to 215 days of closure. 6 to 10 beach advisories with 41 to 82 beach days with

	advisories. Conditions generally do not meet health standards.	advisories. All conditions meet health standards.	advisories. Conditions mostly meet health standards.
Beach and shoreline quality (absence of debris/garbage)	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**L:** Large amounts of debris or trash visible on the shore 3.25 lbs. per 100 feet of shoreline.	**H:** Minimal debris or trash visible on the shore 0.5lbs per 100 feet of shoreline.
Beach and shoreline quality (absence of harmful algal blooms)	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**L:** Numerous harmful algal blooms causing respiratory distress to beach and shoreline users. 0 to 15 beaches open for razor clam digging per year.	**H:** No harmful algal blooms causing respiratory distress to beach and shoreline users. 31 to 58 beaches open for razor clam digging per year.
Views not obstructed by onshore or offshore development	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**L:** Currently low development with no obstructed views. Low condition would be medium to high development on land and offshore development such as wind or wave energy. Limited or no access to the beach or shorelines.	**H:** Low impact of development with no offshore structures and easy access to beaches and shores.
Uncrowded by other recreational users	**L:** 21 or more people encountered during a beach visit.	**L:** 21 or more people encountered during a beach visit.	**H:** 0 to 10 people encountered on a beach visit.
Cost to your household per year	**$0**	**$175**	**$350**
Your preferred choice (check box)	☐	☐	☐

How many days per year would you visit the Outer Coast for the choice you just made? _____
(Number of days)

Please provide a brief comment that helps us understand why you chose the option you most preferred.
_____
_____
_____
_____
_____
_____

How sure are you of the choice you just made? (Check one)
__ Not sure at all

__ Slightly sure
__ Moderately sure
__ Very sure
__ Extremely sure

Appendix C: Outlier Analyses and Other Data Editing

Use Estimation

Outliers

Observations were dropped if the number of annual trips for recreation (trips_rec) was greater than 50 and/or the length of stay of the last trip (days_stay) was greater than or equal to 90 days. Five observations met these criteria. Below we provide the details on which observations were eliminated for estimating use and the values key use variables that go into or are the output of calculations for use (person_trips and person_days) are documented.

1. UUID (data base identification number): 1001000513
   - Annual number of recreation trips (trips_rec) – 100
   - Length of stay on last trip (days_stay) – 1
   - Total Number of Passengers on last trip (passengers_total - . (missing)
   - Annual Person-trips (person_trips) - . (missing)
   - Annual Person-days (person_days) - . (missing)

2. UUID (data base identification number): 1010101105
   - Annual number of recreation trips (trips_rec) – 80
   - Length of stay on last trip (days_stay) – 10
   - Total Number of Passengers on last trip (passengers_total) - . (missing)
   - Annual Person-trips (person_trips) –. (missing)
   - Annual Person-days (person_days) - . (missing)

3. UUID (data base identification number): 1011100257
   - Annual number of recreation trips (trips_rec) – 150
   - Length of stay on last trip (days_stay) – 1
   - Total Number of Passengers on last trip (passengers_total) - 5
   - Annual Person-trips (person_trips) - 750
   - Annual Person-days (person_days) - 750

4. UUID (data base identification number): 1011100594
   - Annual number of recreation trips (trips_rec) – 4
   - Length of stay on last trip (days_stay) – 90
   - Total Number of Passengers on last trip (passengers_total) - . (missing)
   - Annual Person-trips (person_trips) –. (missing)
   - Annual Person-days (person_days) - . (missing)

5. UUID (data base identification number): 1012100232
   - Annual number of recreation trips (trips_rec) – 100
   - Length of stay on last trip (days_stay) – 1
   - Total Number of Passengers on last trip (passengers_total) - 2
   - Annual Person-trips (person_trips) - 200

-   Annual Person-days (person_days) – 200

Sample Weighted Average before and after outlier eliminations.

Before:
-   Annual number of recreation trips (trips_rec) – 1.98
-   Length of stay on last trip (days_stay) – 2.79
-   Total Number of Passengers on last trip (passengers_total) – 2.75
-   Annual Person-trips (person_trips) – 5.21
-   Annual Person-days (person_days) – 12.62

After:
-   Annual number of recreation trips (trips_rec) – 1.76
-   Length of stay on last trip (days_stay) – 2.76
-   Total Number of Passengers on last trip (passengers_total) – 2.75
-   Annual Person-trips (person_trips) – 4.88
-   Annual Person-days (person_days) – 12.29

True Zeros versus Missing

Activity Participation: If an individual did not indicate that they participated in a given activity, they were then assigned a value of zero.

Trips and Days of Recreation: Individuals needed to spend at least one trip and one day to be part of the sample used for estimating person-trips and person-days of recreation activity. Individuals who did not indicate the number of trips for recreation (trips_rec) or length of stay on the last trip (days_stay) were dropped. The calculation for person-trips and person-days also required the number of passengers in the recreation group (passengers_total). If this was missing then person-trips and person-days were missing.

User Entered Activities

Many individuals stated "other" activities that matched a given category or that were not outdoor recreation activities. These responses were corrected and individuals who had listed no outdoor recreation activities (N=13) were dropped.

The activity was changed to "beach going" (9 changes made) if the stated activity was of (or a variation of) the following:

-   Walking/hiking
-   Walk/run
-   Stargazing
-   Running
-   Kite flying
-   Dog walking
-   Searching using metal detector
-   People watching

- Sunning
- Chilling

The activity was changed to "beach driving" (1 change made) if the stated activity was one of (or a variation of) the following:

- Riding four wheelers

The activity was changed to "hiking/biking" (6 changes made) if the stated activity was one of (or a variation of) the following:

- Snowshoe
- Bicycling
- Walking the trails
- Hiking

The activity was changed to "camping" (1 change made) if the stated activity was one of (or a variation of) the following:

- Camping

The activity was changed to "photography" (1 change made) if the stated activity was one of (or a variation of) the following:

- Photography

The activity was changed to "sightseeing/scenic enjoyment" ("other" changed to missing) if the stated activity was one of (or a variation of) the following:

- Naturalism

The activity was changed to "collection of non-living resources" (2 changes made) if the stated activity was one of (or a variation of) the following:

- Rock hounding
- Walking along the ocean and collecting items

The activity was changed to "fishing from shore/pier" ("Other" changed to missing) if the stated activity was one of (or a variation of) the following:

- Jetty fishing

The activity was changed to "collection of living resources" (2 changes made) if the stated activity was one of (or a variation of) the following:

- Clamming

- Crabbing

The activity was changed to "hang gliding/parasailing" (1 change made) if the stated activity was one of (or a variation of) the following:

- Water skiing

The activity was changed to "fishing from a private boat" (1 change made) if the stated activity was one of (or a variation of) the following:

- Fish hatchery salmon run

The activity was changed to "missing" (26 changes made) if the stated activity was one of (or a variation of) the following:

- Wine tasting
- Swimming indoors
- Shopping (souvenirs or grocery)
- Eating out
- Volunteering
- Visiting Museums
- Golf
- Fireworks
- Car show
- Drawing
- Walking through towns

Expenditures

Outliers were eliminated from use above before running summary statistics and the frequency distributions for total group spending per trip, spending per person-trip, and spending per person-day. Spending per person-day was used to screen for outliers. Judgment was used based on extensive experience with spending profiles for recreation to look for outliers on a spending item.   All the inputs used in calculating expenditures per person-day were screened for outliers. The survey asked respondents for spending per recreation group for the last trip. It also asked for the number of people that were covered for each spending item. The number of days on the last trip was also obtained and used in the calculation of spending per person-day. The number of people that were reported to be covered by an expenditure were in several cases responsible for and expenditure being an outlier. Outliers aren't always higher than those that are not considered outliers, the number of people could exceed the number in the group reported as passengers_total in the database. We eliminated some as will be shown below based on too many people included. Expenditures without eliminating outliers would have been lower in these cases and might offset eliminating outliers with high expenditures, but we eliminated them anyway, so the final weighted means might not seem so different after the full adjustments.

Once these values were identified, an assessment was made as to how much of an impact removing them would have on the weighted sample sum and the weighted mean. Often one observation had more influence because it had a large sample weight. Generally, outliers were eliminated if their sum made up 10 percent or more of the weighted sample sum, this in turn would have a significant effect on the weighted sample mean.

Parking: Spending per person per day greater than or equal to $60.
Car Fuel: Spending per person per day greater than or equal to $100 or people greater than 10.
Air Fare: Spending per person per day greater than or equal to $300 or people equal to 100.
Train Fare: Spending per person per day greater than or equal to $125 or people equal to 14.
Groceries: Spending per person per day greater than or equal to $50 or spending per goup per trip equal to $1 and people equal to 5.
Restaurant: Spending greater than or equal to $100 or people greater than or equal to 60.
Sundries: None.
Car Rental: Spending per person per day greater than $80 or the number of people greater than 50.
Dive Equipment Rental: Spending per person per day equal to $125.
Other Equipment Rental: none.
Entrance fees: None.
Lodging: Spending per person per day greater than $200.
Charter boat/Guide Service: none.
Lessons: Spending per person per day greater than $500.
One Day fishing License: Spending per person per day greater than $55 or per person greater than or equal to $3 and less than or equal to $7.50.
Fishing Tackle: none.
Boat Rental: Spending per person per day greater than or equal to $250 or people equal to 100.
Boat Ramp Fees: Spending per person per day greater than or equal to $125.
Boat Fuel: Spending per person per day greater than or equal to $120.
Casino: none.
Other: none.

Table C.1 has the before and after outlier removal weighted means for each expenditure item for expenditures on a per person-trip basis.

Table C.1

Spending Category	Before		After	
	Spending	N	Spending	N
Parking	$1.09	2,345	$0.97	2,341
Car fuel	$24.44	2,345	$23.56	2,314
Airfare	$2.55	2,349	$1.92	2,346
Train fare	$1.90	2,351	$1.42	2,345
Groceries	$14.56	2,342	$13.67	2,325
Restaurant	$24.46	2,349	$24.24	2,344
Shopping	$9.77	2,350	$9.77	2,350
Sundries	$1.60	2,344	$1.60	2,344
Car Rental	$1.31	2,350	$1.06	2,343
Dive Equipment Rental	$0.32	2,350	$0.28	2,349
Other Equipment Rental	$0.69	2,352	$0.69	2,352
Entrance fees	$1.50	2,349	$1.50	2,349
Lodging	$26.68	2,338	$26.07	2,336
Charter Boat/Guide Service	$2.24	2,350	$2.24	2,350
Lessons	$1.50	2,352	$0.19	2,351
Fishing Licenses	$0.54	2,348	$0.50	2,336
Fishing Tackle	$0.72	2,351	$0.72	2,351
Boat Fuel	$0.77	2,351	$0.62	2,350
Boat Rental	$0.95	2,351	$0.84	2,348
Boat Ramp fee	$0.15	2,352	$0.11	2,351
Casino	$0.22	2,352	$0.22	2,352
Other	$0.24	2,352	$0.24	2,352