



Ocean and Coastal Recreation on the Pacific Coast of Washington

Survey Methods and Survey Tool Demo

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Introduction

- Quick background and relevance to MSP
- Experience in Oregon and Mid-Atlantic
- Project funding
 - 2012/13: Moore Foundation
 - 2014/15: MSP funds via DNR with WCMAC recommendation
- Surfrider engagement and outreach with gatekeepers
- Point 97 technical expertise

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Goals of this Presentation

- Introduce the survey effort
- Walk through methods and anticipated data products
- Demo Beta version of survey tool
- Feedback on survey design
 - Is it clear/reasonable what we're asking in the survey questions?
 - Are there activities missing from the activity list?
 - In what ways can we improve the survey tool so that it's easy and intuitive?

Goals of the Ocean and Coastal Recreation Study

1. Establish a spatial baseline of coastal recreation use patterns (intensity of use and economic value)
 1. How often are people going to specific areas of the coast to recreate?
 2. What activities do they do there?
 3. What is the economic value of those coastal areas?
2. Characterize coastal recreation: demographics; participations rates in specific activities; trip expenditure profiles
 1. What types of people go to the coast to recreate?
 2. What percentage of people participate in specific activities?
 3. How much do people spend when they recreate on the coast?
3. Engage coastal recreation stakeholders in state marine planning efforts

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Project Methods

- We plan to deploy the survey using two methods:
 - Online standing panel survey
 - Probability based representative sample weighted by demographic and geographic characteristics
 - Online survey of approximately 6,000 WA residents
 - Results can be extrapolated to the WA population
 - Opt-in online survey method
 - Outreach to coastal recreation user groups to solicit participation in online survey
 - Capture data on activities practiced by a smaller portion of the population that is not adequately captured in the panel survey (e.g., surfing, kayaking, SCUBA diving, etc)

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Project Outputs/Products

- Estimates of total population size and demographics of coastal recreational users overall and for select activity
- Maps and spatial data sets depicting:
 - Spatial patterns of use (extent and intensity of use quantified by the number of trips) for overall and specific coastal recreational activities
 - Spatial patterns of the economic value attributed to overall and specific coastal recreational activity locations
- Estimates of the economic contribution (based on extrapolated trip expenditures) of overall coastal recreational use and specific coastal recreational activities at the state level.

Coastal Recreational Use

The Surfrider Foundation and NaturalEquity surveyed a representative sample of OR and WA residents (n = 4,072) to obtain detailed spatial and economic data on Oregon's coastal recreational use.

Table 36. Total estimated coastal visitation and expenditures, 2010

Total population	4,384,959
Average # annual trips from sample	6.3
Total estimated coastal trips	27,625,242
Average direct expenditure per trip	\$87.72
Total direct expenditures	\$2,423,286,202

Source: LaFranchi and Daugherty (2011)

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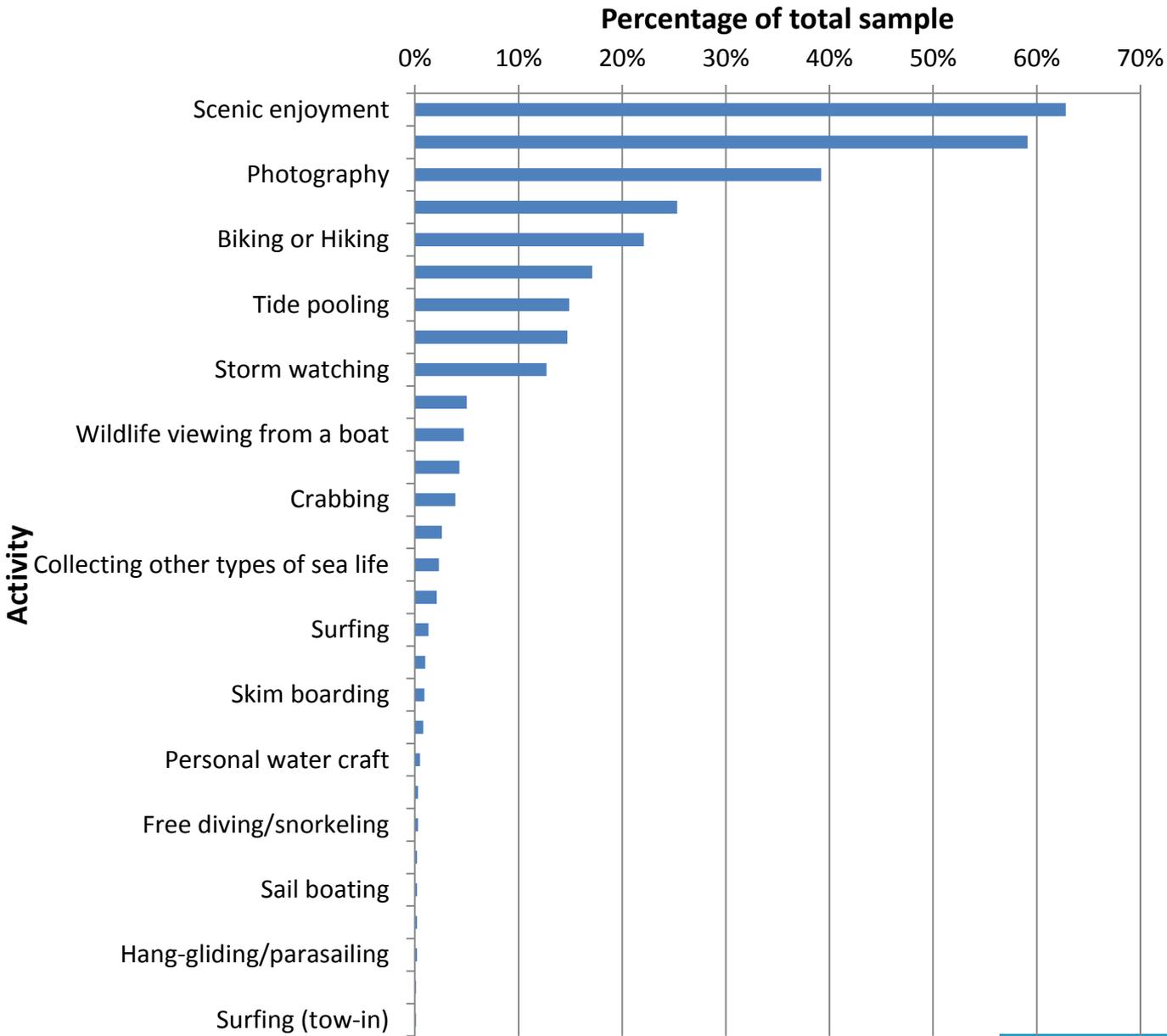


Oregon Coastal Recreation Survey Results

Table 34. Distribution of coastal trips reported by panel survey respondents

Oregon county of trip	Percent of total trips
Lincoln	43%
Clatsop	18%
Tillamook	14%
Lane	9%
Coos	8%
Curry	5%
Douglas	4%
Total	100%

Source: LaFranchi and Daugherty (2011)



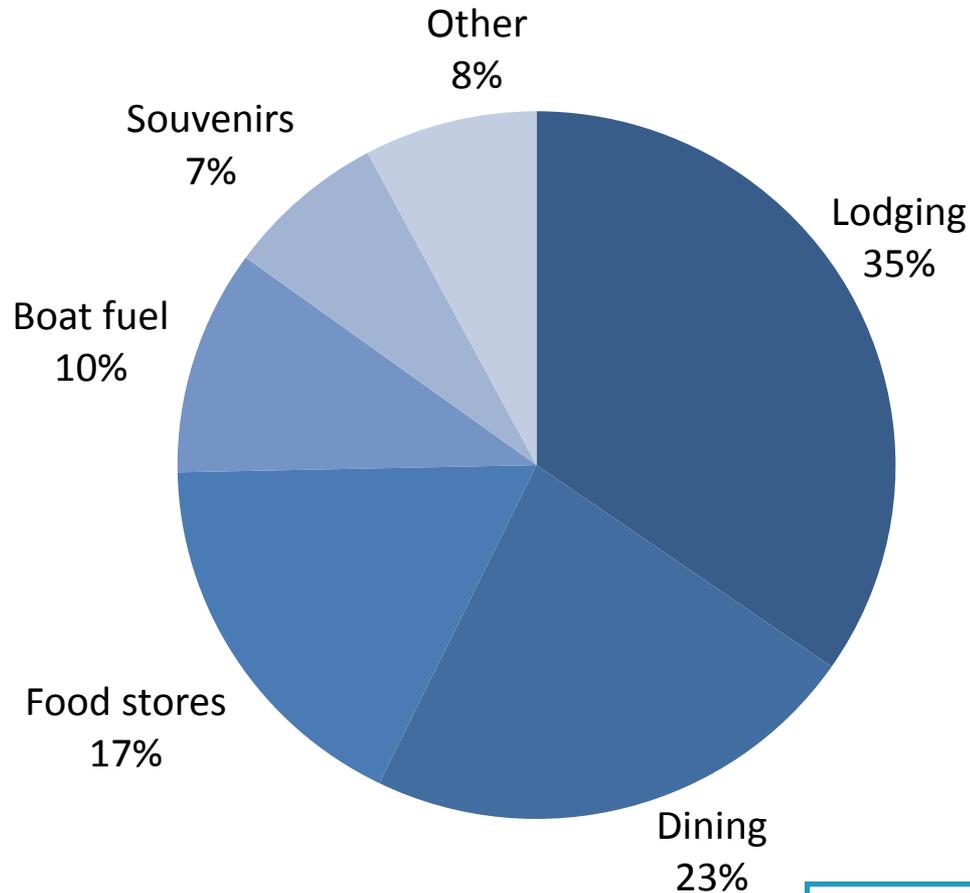
Participation
in coastal
activities as a
percent of all
survey
respondents,
2010

*Source: LaFranchi and
Daugherty (2011)*

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Average expenditures per coastal trip, 2010



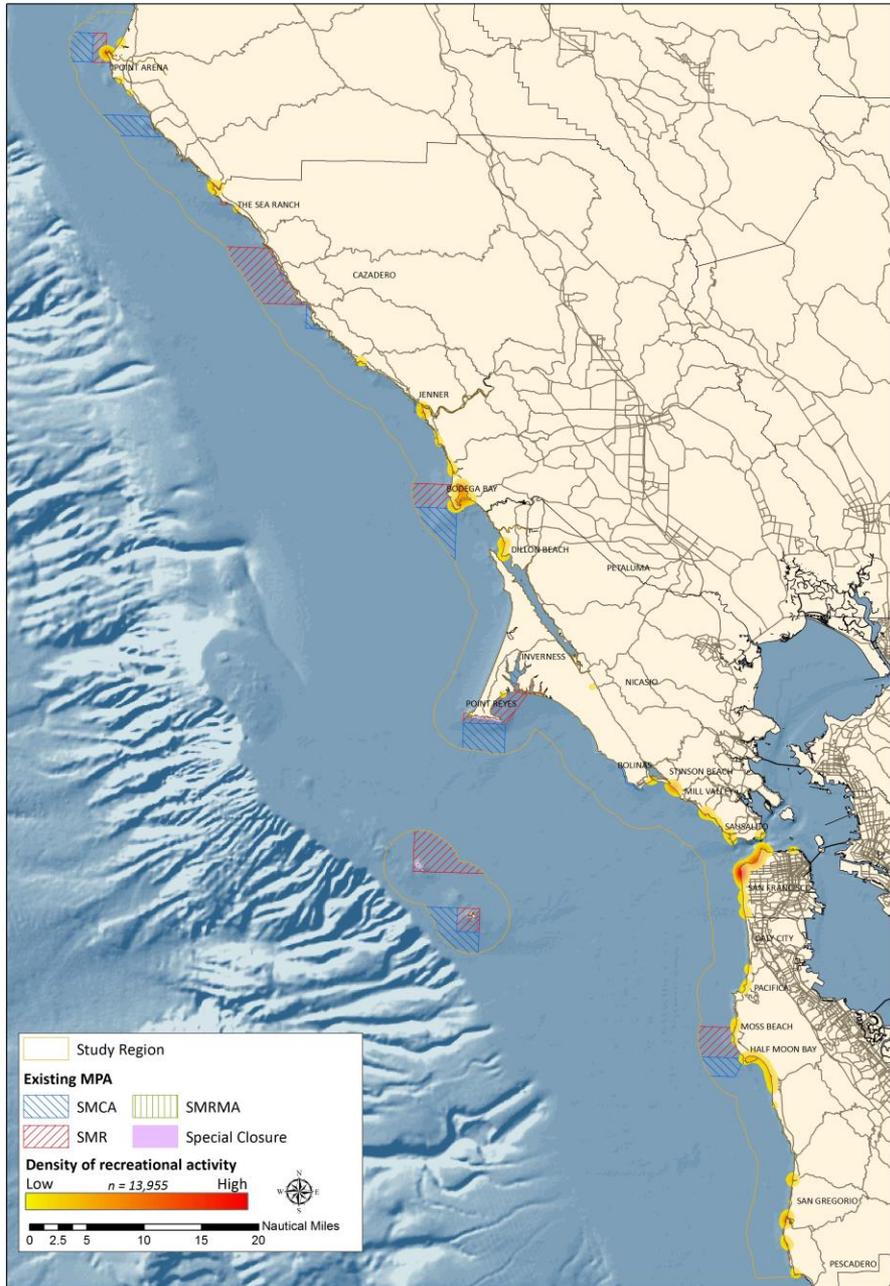
Source: LaFranchi and Daugherty (2011)

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California North Central Coast Coastal Recreation Survey

All Survey Waves - All Activities



Final Map Product

COASTAL RECREATION MAP PRODUCTS

- Example of map products depicting spatial patterns of coastal recreation use
- Maps created for each activity and activity groupings

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Non-consumptive Coastal Recreation Expenditures by County

Tillamook

County: Tillamook
Total Estimated Expenditure in this County: \$324,418,764.61
Estimated Number of Trips to this County: 4128468
Percent of Trips to this County: 13.39 %

Source:

LaFranchi, C. and C. Daugherty. 2011. "Non-consumptive Ocean Recreation in Oregon: Human uses, economic impacts & spatial data." Portland, OR: Surfrider Foundation, NaturalEquity, Ecotrust. [Click Here for Full Report](#)

Data SIO, NOAA, U.S. Navy, NGA, GEBCO

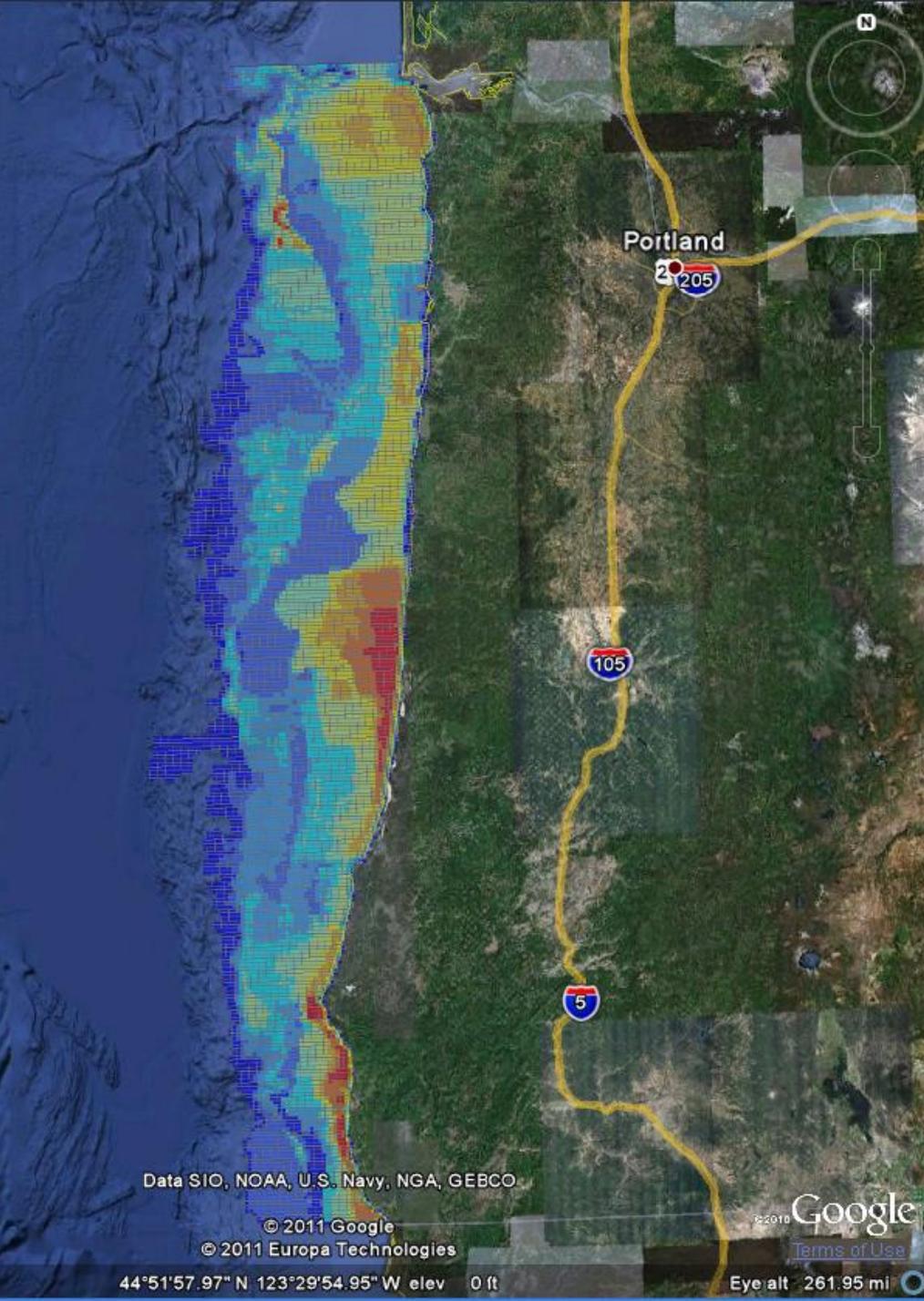
Image U.S. Geological Survey
Image State of Oregon

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45°35'42.35" N 123°51'48.96" W elev 0 ft

Eye alt 292.35 mi





MOCK UP Example of Economic Value Spatial Dataset

Google Earth Data Layer

Value is spread across
planning units
(1 square mile area)



Coastal and Ocean Recreation:

MOCK UP EXAMPLE: Estimated economic value of specific 1 square-mile planning units

Block Number : 3134

ACTIVITY	PERSON TRIPS PER YEAR	ANNUAL ECONOMIC VALUE (based on trip expenditures)
Beach going	100,234	\$226,342
Scenic enjoyment	126,336	\$76,646
Wildlife viewing	5,234	\$56,342

Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Image © 2011 DigitalGlobe
Image State of Oregon
© 2011 Google

42°48'10.13" N 124°36'39.52" W elev 0 ft

Brookings

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Demo of Opt-In Survey Tool

- Primary goal of opt-in survey is to collect as much spatial data as possible from respondents
- Can be taken on desktop computers, tablets, and mobile devices.
- Demo Beta version of the tool
- Feedback on survey design (by March 21st) :
 - Is it clear/reasonable what we're asking in the survey questions?
 - Any major activities missing from activity list?
 - In what ways can we improve the survey tool so that it's easy and intuitive?

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Summary of Survey Results

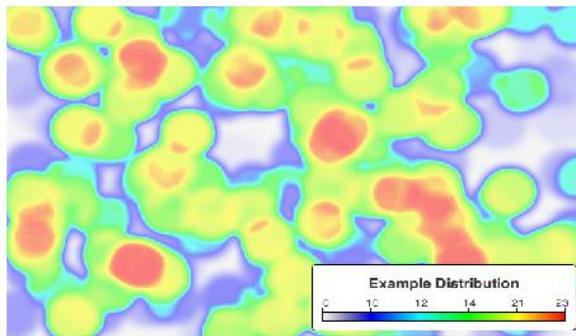
Overview

327 surveys taken
 212 completed (64.8%)
 115 incomplete (35.2%)

568 activity points
1.68 activity points per survey

Activity Points

Filter by activity..



Distribution by County

Filter by activity..

County	Surveys	Activity Points
Snohomish County	102	185
Grays Harbor County	86	105
Jefferson County	51	98
Skagit County	45	79
Clallam County	37	82
Pacific County	6	19
Total	327	568

Distribution by Activity

Filter by county..

Activity	Activity Points
Scenic enjoyment/sightseeing	90
Camping	81
Photography	62
Fishing (hook and line) from a boat/kayak	34
Fishing (hook and line) from pier/shore	31
Tide pooling	9
Total	307

Administrator Dashboard

- Review 'heat maps' of activities with stakeholders
- Review total number of respondents by county and activity
- Can be used to target outreach efforts

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Questions/Feedback

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