

# Social Values of Marine Ecosystem Services near the Olympic Coast

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# WHAT ARE SOCIAL VALUES?



# HOW CAN WE MEASURE THEM?



Ask how much one values something

Cost Benefit Analysis



Ask-What are you willing to pay?

Estimate the cost for replacement



Ask how life would change without it?

Measure changes in health



# HOW CAN WE USE THEM?

Uses of social value information includes:

- Decisions about public access
- Distributing openings and closures
- Permit decisions
- Assessments of coastal condition
- Learn the location of high value places that have not been previously identified



# SOCIAL VALUE ASSESSMENTS IN PROTECTED AREAS

- ✓ Completed
  - South Carolina Estuary
  - Texas Estuary
  
- Underway
- Planning
  - Olympic Coast



- Home
- Living Sanctuary
- Visitor Information
- Ocean Literacy
- Science
- Management
- Resource Protection
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## WELCOME



Welcome to **NOAA's** official website for Olympic Coast National Marine Sanctuary. Within these pages you'll find words, maps and pictures that just begin to hint at the wonders of this important part of America's marine landscape and the **National Marine Sanctuary System**.

RSS Feed

Search



Celebrate 40 Years of Sanctuaries



Gary L. Friedrichsen  
Orca whales are one of 29 species of marine mammals in the sanctuary.

Olympic Coast National Marine Sanctuary includes 2,408 square nautical miles of marine waters off the rugged Olympic Peninsula coastline. The sanctuary extends 25 to 50 miles seaward, covering much of the continental shelf and several major submarine canyons. The sanctuary protects a productive upwelling zone - home to marine mammals and seabirds. Along its shores are thriving bald and

Aesthetic  
Biodiversity  
Economic  
Legacy  
In and of itself  
Learning  
Human Needs  
Recreation  
Spiritual  
Therapeutic  
Wilderness  
Inspiration  
Socializing  
Treaty Rights



Bathymetric and topographic features in and near Olympic Coast National Marine Sanctuary.

# ADMINISTERING SURVEYS AND PRODUCTS

Random Sample  
of Residents



Intercept  
Surveys of Users



Snowball Sample  
of VIPs



Surveys

- Maps of Values Intensity
- Modeled relationships between value locations and environmental characteristics
- Analysis of management-related question responses

# EXAMPLES OF SURVEY QUESTIONS

## Conditions of the Olympic Coast

Below we ask for your opinion of the change in conditions at the Olympic Coast while you have lived in or have been visiting the area.

	<b>Large Increase</b>	<b>Increase</b>	<b>Neutral</b>	<b>Decrease</b>	<b>Large Decrease</b>	<b>Unsure or Don't Know</b>
<b>Shellfish</b>						
<b>Fish, in general</b>						
<b>Rockfish</b>						
<b>Seagrass/seaweed/kelp</b>						
<b>Marine mammals</b>						
<b>Seabirds/shorebirds</b>						
<b>Public access to land and water resources</b>						
<b>Frequency of adverse conditions (i.e. red tides, algal blooms, jellyfish)</b>						

Place Attachment

Below are several questions about your use of the Olympic Coast and the role it plays in the life of your family and your community.

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Unsure or Don't Know</b>
<b>The Olympic Coast is the best place to satisfy my outdoor recreation needs</b>						
<b>The Olympic Coast represents a way of life in my community</b>						
<b>The Olympic Coast is important for providing habitat for fish and other wildlife</b>						
<b>I am very attached to the Olympic Coast</b>						
<b>I get more satisfaction out of visiting the Olympic Coast than any other place</b>						
<b>My community's economy depends on the natural resources of the Olympic Coast</b>						
<b>The Olympic Coast contributes to the character of my community</b>						

## Demographics

Finally, we would like to ask just a few questions to help us understand your needs.

1. Does your household income depend on products or services related to Olympic Coast resources?

\_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Unsure

If yes, please describe the source of the income:

- \_\_\_\_\_ Commercial fishing
- \_\_\_\_\_ Commercial shellfishing
- \_\_\_\_\_ Tourism/Guiding
- \_\_\_\_\_ Other

2. In what year were you born?

\_\_\_\_\_

3. Are you \_\_\_\_\_ male  
\_\_\_\_\_ female?

4. What is your highest level of education?

- \_\_\_\_\_ Less than high school diploma
- \_\_\_\_\_ High school diploma or GED
- \_\_\_\_\_ College degree- 2-year or 4-year
- \_\_\_\_\_ Graduate degree

5. What is your average yearly income?

- \_\_\_\_\_ \$39,999 or below
- \_\_\_\_\_ \$40,000-\$69,999
- \_\_\_\_\_ \$70,000 or more

6. What is your occupation?

\_\_\_\_\_

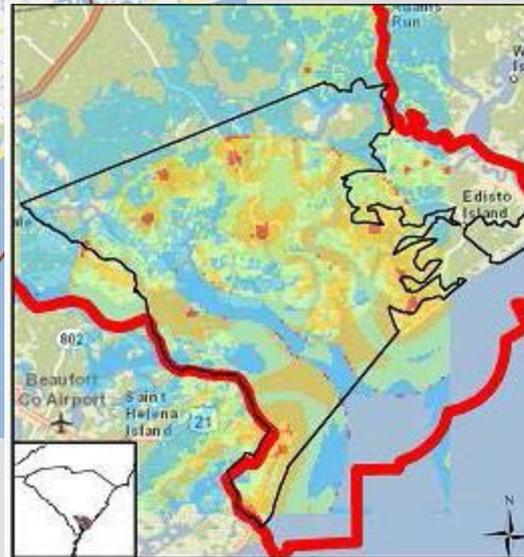
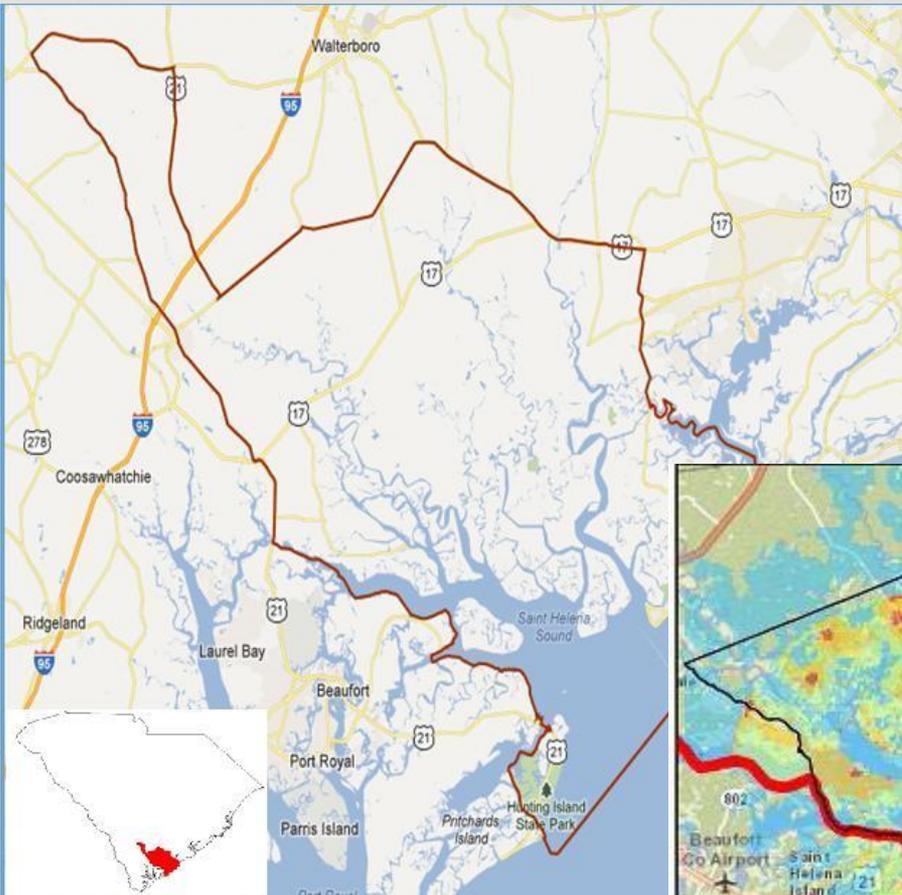
7. What is your ethnicity?

- \_\_\_\_\_ Hispanic or Latino
- \_\_\_\_\_ Not Hispanic or Latino

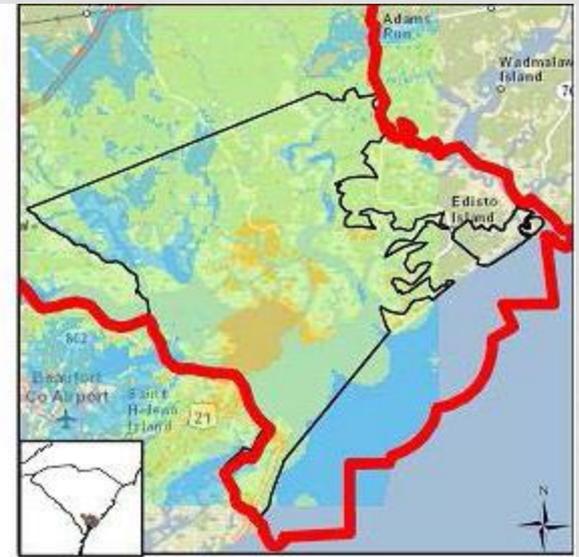
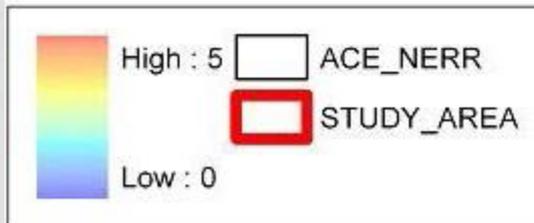
8. With which racial group(s) do you most identify? (Choose one or more)

- \_\_\_\_\_ Alaska Native
- \_\_\_\_\_ Asian
- \_\_\_\_\_ Black or African American
- \_\_\_\_\_ Native American
- \_\_\_\_\_ Native Hawaiian or Other Pacific Islander
- \_\_\_\_\_ Caucasian

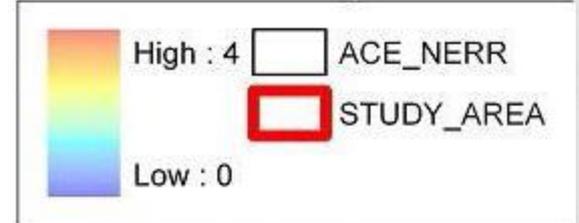
# Aesthetics and Biodiversity Values Intensity Maps for the ACE Basin, SC NERR



Aesthetics



Biodiversity





# OLYMPIC COAST PROCESS

## **Refine Survey**

Select approved questions appropriate to this place

## **Develop Maps**

Work with OCNMS and partners to develop a useful map for the survey and for analysis

## **Collect Data**

Make decisions about who and where we will collect data

## **Conduct Analysis**

As draft analyses are completed, tailor products for OCNMS decision-making

# QUESTIONS FOR SAC

## **Sampling Schemes**

We would like to conduct intercept surveys. Are there particular times or events we should be sure to include? What is the best time to conduct a random sample of residents in nearby counties? Are there particular groups of people we should include?

## **Survey Review**

The OCNMS Staff will be working with the researchers to refine the survey. Then we will share with partners so that we can include their ideas then report back to SAC. Does this sound like a good plan?

## **Management Issues**

Are you aware of upcoming or new management issues that we need to take into account in the survey or in our sampling strategy?



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