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Marine Sector Analysis Report: Recreation and Tourism

Final Report | October 31, 2014

prepared for:

Washington Coastal Marine Advisory Committee

prepared by:

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NOTICE

The information presented in this report reflects data collected from readily available sources and the opinions of a limited number of individuals knowledgeable about this sector, including representatives of private business interests. The views and opinions expressed herein are those of the individuals consulted and are not necessarily representative of the views of any state agency or of the perspectives of other experts or participants in the marine spatial planning process, either within or outside the sector. Industrial Economics, Inc. is solely responsible for the content of this report.

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LIST OF ACRONYMS AND ABBREVIATIONS

ACOE	United States Army Corps of Engineers
CSC	NOAA's Coastal Services Center
DFW	Washington Department of Fish and Wildlife
DNR	Washington Department of Natural Resources
Ecology	Washington Department of Ecology
EIS	Environmental Impact Statement
FWS	United States Fish and Wildlife Service
GDP	Gross Domestic Product
MSP	Marine Spatial Planning
NOAA	National Oceanic and Atmospheric Administration
NOEP	National Ocean Economics Program
NPS	National Park Service
OBA	Ocean Beach Approach
OIA	Outdoor Industry Association
ONP	Olympic National Park
RCO	Recreation Conservation Office
SCA	Seashore Conservation Area
SEPA	State Environmental Policy Act
WCMAC	Washington Coastal Marine Advisory Council
WSPRC	Washington State Parks and Recreation Commission
USCG	United States Coast Guard

PREFACE

The Washington Department of Ecology is leading an effort to develop a marine spatial plan (MSP) for Washington's Pacific coast. The plan is being developed in coordination with an interagency team that includes the Office of the Governor, the Washington Department of Natural Resources (DNR), the Washington Department of Fish and Wildlife (DFW), Washington Sea Grant, and the Washington State Parks and Recreation Commission.[1] The planning process also involves and engages coastal stakeholders, the public and local, tribal and federal governments. In particular, the Washington Coastal Marine Advisory Council (WCMAC) is advising on the development of the plan. WCMAC is a 26-member advisory group established in the Governor's office and comprised of a diverse range of stakeholder interests. In support of this effort, DNR has engaged Industrial Economics, Incorporated and BST Associates to develop reports on five major sectors of the state's marine economy: aquaculture; fishing (non-tribal); marine renewable energy; recreation and tourism; and shipping. These reports are intended to help state agencies, the WCMAC, and other stakeholders understand the trends and potential issues associated with economically important activity in the marine environment.

This report focuses on the recreation and tourism sector. It synthesizes information from publicly available sources to provide an overview of current economic activity, major trends in activity, and potential future resource uses and needs. In addition, the report draws on perspectives and insights from industry experts and relevant government agencies to highlight critical issues affecting the sector – including any current or potential future conflicts within the sector or with other sectors – and the role of marine spatial planning in addressing these issues (see Appendix A for a complete list of individuals interviewed). It also identifies key remaining questions, data quality issues, and data gaps.

WASHINGTON MARINE SPATIAL PLANNING OVERVIEW

Marine spatial planning is a public process of analyzing and allocating the spatial and temporal distribution of human activities in marine environments to achieve ecological, economic, and social objectives. The MSP will address issues resulting from increasing pressures on the resources in the area, as well as conflicts between and among existing and proposed new uses of these resources. The planning process will also involve and engage coastal stakeholders, the general public, and local, tribal, and federal

[1] For additional information on Washington's marine spatial planning efforts, see RCW 43.372 and http://www.msp.wa.gov. An interactive mapping tool is available at: www.msp.wa.gov/explore/mapping-application.

governments. The MSP will develop a comprehensive plan for addressing these types of potential activities to avoid and minimize impacts, reduce potential conflicts, and foster a healthy ecosystem. In addition, the MSP provides a basis for improving coordination and implementation of existing state and local laws, regulations and policies. It also provides an opportunity to coordinate with federal agencies and tribes related to their authorities. The law does not create any new authority under the MSP, nor does the MSP have authority to affect any existing or proposed project, use, or activity during the development of the plan (RCW 43.372.060). Instead, the MSP provides a consistent information framework for agencies to use when applying their existing authorities in response to particular project proposals and permit processes.

As part of the MSP planning process, the State Environmental Policy Act (SEPA) requires the state to develop an Environmental Impact Statement (EIS); the SEPA scoping summary was recently released (Ecology 2014). The EIS should be finalized within the next year; the MSP is expected to be finalized by December 2016 (Ecology 2013).

SECTOR ANALYSIS STUDY AREA

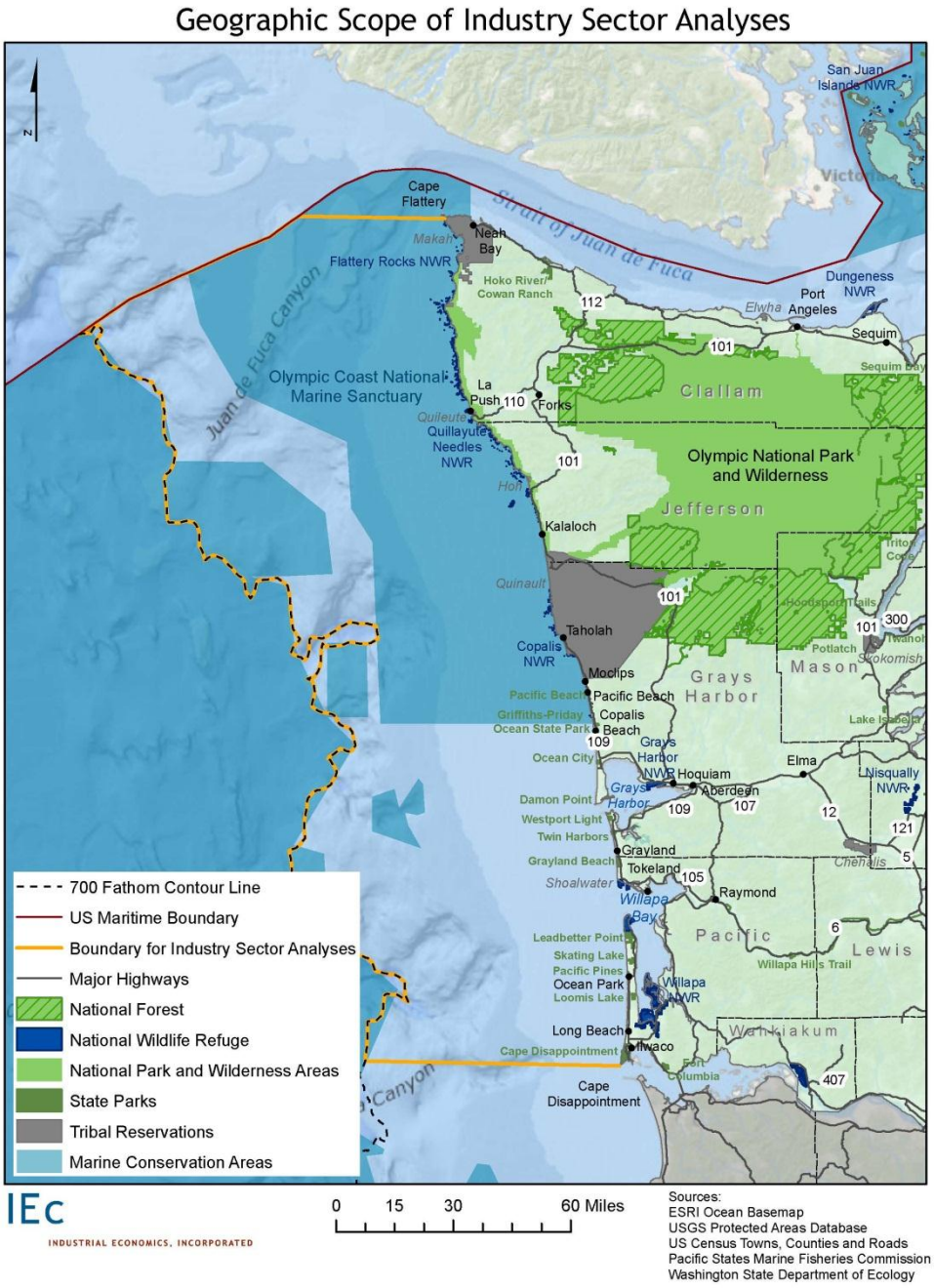
The activities considered in this sector profile are those which occur or may in occur in the future in marine or estuarine waters off the Washington Pacific coast. The area of interest includes state and federal waters from Cape Disappointment north to Cape Flattery and seaward to a depth of 700 fathoms, including Willapa Bay and Grays Harbor. The marine shoreline bordering this area includes roughly 157 miles of Pacific coastline, 89 miles in Grays Harbor, and 129 miles in Willapa Bay (Ecology 2001). The study area does not include the Strait of Juan de Fuca, the Lower Columbia River Estuary, or Puget Sound. The study area is illustrated in Exhibit P-1.

The Washington Pacific coast is mostly rural, and is supported by an economy based on tourism, recreation, and natural resources (e.g., commercial fisheries and timber). The region includes four counties: Jefferson, Clallam, Grays Harbor, and Pacific. In 2013, the total population of these counties was roughly 194,000, or three percent of the state population (Census Quickfacts 2014). In recent years, population growth and economic growth in these counties has been below the state average.

The Olympic Coast National Marine Sanctuary makes up most of the northern half of the study area, running north from the mouth of the Copalis River along the coast and extending seaward between 25 to 40 miles, including 2,408 square nautical miles of marine waters (Olympic Coast National Marine Sanctuary 2014). Olympic National Park occupies significant portions of the Clallam and Jefferson County coastlines. Other marine conservation areas in the study area include various federally-designated Essential Fish Habitat areas. In addition, areas off the Washington coast are designated training and testing areas for the U.S. Navy.[2]

[2] The Naval Undersea Warfare Center Keyport Range Complex is located within the study area. For more information see U.S. Navy 2014, www.nwtteis.com.

EXHIBIT P-1. MAP OF STUDY AREA INCLUDING KEY FEATURES



The Makah, Quileute, Hoh, Quinault, and Shoalwater Bay Indian Tribes have reservation lands along the coast. Ocean resources are both economically and culturally important to these tribes, as are the tourism and recreation benefits offered by their coastal locations. To the extent that we were able to gather information related to recreation and tourism activities on reservation lands, these data are presented in the report.

The southern portion of the coast is more heavily developed than the northern coast, with a greater number of urbanized areas and a greater concentration of marine industry and infrastructure. Developed areas in the southern half of the coast include the cities of Hoquiam and Aberdeen and the Port of Grays Harbor, as well as the coastal towns of Pacific Beach, Ocean Shores, Westport, Ocean Park, Seaview, Long Beach, and Ilwaco. Numerous state park facilities are located along the southern half of the Washington coast. In addition, Willapa Bay, located in the southern portion of the study area, contains the Willapa Bay National Wildlife Refuge, and an economically important oyster industry.

SCOPE OF ECONOMIC INFORMATION CONSIDERED

This report focuses on the ocean economy, considering economic activity within the state that derives all or part of its inputs from the ocean (Colgan 2007). The report further focuses on current activities or activities that may occur in the reasonably foreseeable future. As a general guide we consider activities that are expected to occur within a planning horizon of 20 years. This timeframe should be sufficient to guide long-term planning, provided the MSP is periodically updated to take new information into account.

ORGANIZATION OF THE REPORT

The remainder of the report is organized as follows:

- Section 1 provides an introduction to the sector.
- Section 2 summarizes the current status of the sector.
- Section 3 describes the key issues facing the sector.
- Section 4 provides an inventory of the available economic data for the sector, and highlights limitations of the existing data and data gaps.
- Appendix A includes a summary of expert interviews.

SECTION 1 | INTRODUCTION TO THE RECREATION AND TOURISM SECTOR

SECTOR DEFINITION

The Washington Pacific coast provides numerous opportunities for recreation and tourism. The natural beauty of the coast and surrounding ecosystems attracts millions of visitors both from the Northwest region and from the rest of the country. The coast offers prime beach going experiences, as well as popular marine fishing and wildlife viewing opportunities.

For purposes of this analysis, the recreation and tourism sector is defined to include activity associated with recreational use or enjoyment of Washington's Pacific coastal waters, as described in the report's preface. This includes activity that occurs adjacent to the water, as well as activity on or in the water. We also note that recreational fishing is discussed in a separate report on the fishing sector.

HISTORY, TRENDS AND OPPORTUNITIES

Washington's Pacific coast has a long history of use for recreational purposes, dating to well before 1938, when President Franklin Roosevelt established Olympic National Park. In many respects, little has changed along the coast since Native American tribes first made it their home. Opportunities to enjoy the area's natural environment, including the ocean, have always been a major draw for visitors, and remain so today.

Much of the state's Pacific coast, excluding National Park and Indian Reservation lands, is included in the Washington State Seashore Conservation Area (SCA), established for public recreational use and enjoyment, and managed by the Washington State Parks and Recreation Commission (WSPRC). As recognized in the Washington State Seashore Conservation Act originally passed in 1967:

> "*The beaches bounding the Pacific Ocean from the Straits of Juan de Fuca to Cape Disappointment at the mouth of the Columbia River constitute some of the last unspoiled seashore remaining in the United States. They provide the public with almost unlimited opportunities for recreational activities, like swimming, surfing and hiking; for outdoor sports, like hunting, fishing, clamming, and boating; for the observation of nature as it existed for hundreds of years before the arrival of Europeans; and for relaxation away from the pressures and tensions of modern life*" (RCW.79A.05.600).

As the preface to this report notes, there are major differences between the northern and southern portions of the Washington Pacific coast. The northern coast is dominated by

high rocky sea cliffs, as well as islands and sea stacks scattered offshore. To the north, the major recreation features are Cape Flattery, Olympic National Park's campgrounds and trails, several well-known surfing beaches, and various Tribal facilities, including lodging, marinas, and trails. The northern coast primarily attracts visitors looking to spend time connecting with nature.

The southern coast from the Quinault reservation to Cape Disappointment provides a different experience, allowing visitors to enjoy a natural setting while remaining connected to the amenities associated with more developed areas. The geography along the southern coast is dominated by long sandy beaches created by sand carried northward from the mouth of the Columbia River. In addition to coastal beach activities, peninsulas such as Point Brown, Damon Point, and Long Beach offer access to the protected, calmer waters of Grays Harbor and Willapa Bay, where watersports like kayaking, windsurfing, and paddleboarding are popular. The southern coastal area contains more than ten state park facilities, as well as several major coastal communities. The Westport Marina with 600 slips is the largest coastal marina in the Northwest and provides a base for the state's largest charter fishing fleet (Port of Grays Harbor 2014).

Recreation and tourism are often the most popular human uses of coastal and marine settings (Lew 2014). The Washington Pacific coast is a very popular recreation and tourism destination, for both day and overnight trips. The region's most prominent destination, Olympic National Park, receives an estimated three million visitors annually (NPS 2014). According to the National Ocean Economics Program, the recreation and tourism sector contributes more jobs to Washington's ocean economy than any other sector (NOEP 2014).

The importance of tourism and recreation to coastal communities' economies is well-recognized at the local level. For example, a recent report by the Grays Harbor Economic Development Council states, "[t]he beach is the driving force for tourism, a $30 million per year industry, in Grays Harbor" (Greater Grays Harbor Inc. 2014). Anecdotal evidence from interviews with local stakeholders indicates that for Ocean Shores, and likely for other coastal towns, tourism is the heart of all business (Personal comm. M. Plackett 2014). Interviewees for a previous economic analysis cited tourism activities as drivers of the economy and tax base for both ports and municipalities along Washington's coast (University of Washington 2013).

Detailed information on recreation and tourism visitation and expenditures in Washington's coastal counties is not readily available; however, statewide trends are informative. Tourism statewide is slowly recovering following the economic slowdown that began in 2008. A recent profile for Pacific County states that the county's reliance on tourism was hurt by high gas prices and the recession in general (WA State Employment Security Division 2012), but statewide data indicate that tourism in Washington State began to improve in 2013. Despite the recent downturn, the long-term trend statewide has been positive. From 2002 to 2012, for example, tourism destination spending in Washington increased from $9.3 billion to $14.5 billion (2014$) (Dean Runyan 2014). Similarly, expenditures associated with wildlife-related recreation in

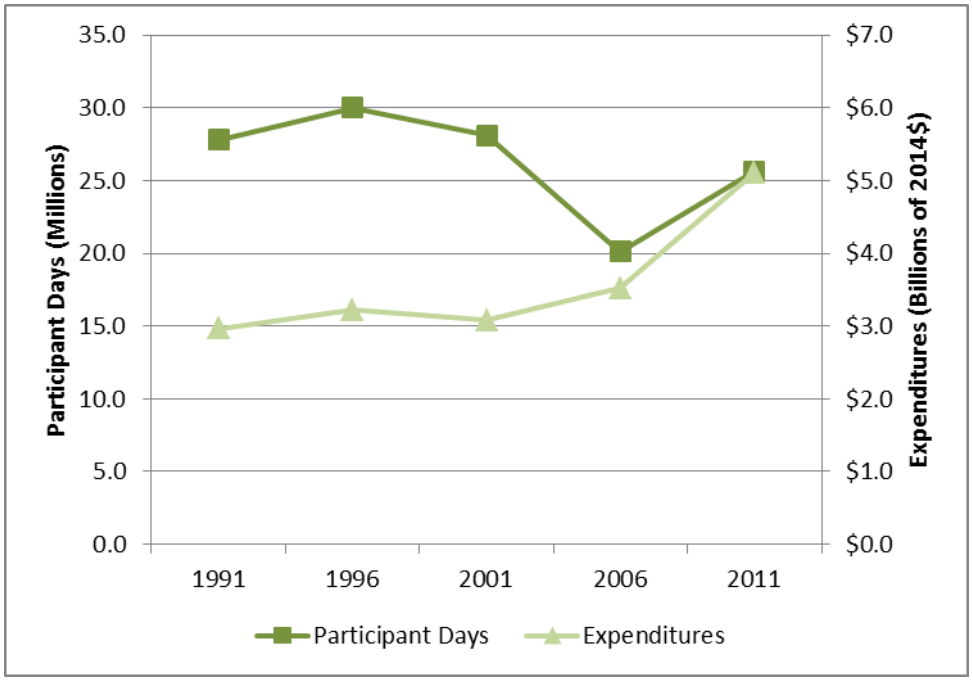
Washington State have experienced long-term growth, despite inconsistent trends in overall participation (see Exhibit 1-1).

SURVEY OF WILDLIFE-RELATED RECREATION: WASHINGTON

There were 2.8 million participants (state residents and nonresidents) in wildlife-related recreation in Washington State in 2011, down from 3.0 million in 2001. From 2001 to 2011, participant days spent in wildlife-related recreation decreased from 28.1 million to 25.6 million. Nonetheless, total expenditures for fishing, hunting, and wildlife-viewing recreation in Washington State increased from $3.1 billion in 2001 to $5.1 billion in 2011 (2014$)(FWS 2003 and FWS 2014).

In a trend related to tourism, development of second-home communities that incorporate amenities and a rental program have become popular along the southern coast. Seabrook, a beach town designed around new urban principles, was founded in 2005 just south of Pacific Beach. This development currently includes 250 homes (half of which are in the Seabrook Cottage Rentals program), and is slated to expand to a total of 300 homes and over 450 units (Seabrook 2014). The town includes beach access and has its own retail district. A smaller but similar project has been proposed for development in Ocean Shores (Bruscas 2013).

EXHIBIT 1-1. STATEWIDE WILDLIFE-ASSOCIATED RECREATION



Source: FWS 2014, FWS 2008, FWS 2003, FWS 1998, FWS 1993

SUMMARY OF KEY ISSUES

In our discussions with local experts, we identified no major issues currently affecting the recreation and tourism sector. There is concern, however, about the impact of potential future marine renewable energy projects on recreational fishing and other water sports, such as surfing. In addition to these concerns, Exhibit 1-2 highlights issues that may affect ocean-derived recreation and tourism in the study area. A detailed description of these issues is provided in Section 3. In addition, details on issues affecting recreational fishing are included in a separate fishing sector report.

EXHIBIT 1-2. LIST OF POTENTIAL ISSUES AFFECTING RECREATION AND TOURISM SECTOR

ISSUE	CONCERNS
Access issues	• Preservation/availability of access • Overcrowding (as popularity/population grows) • Increased rail traffic (blocking Highway 12 , delaying traffic)
Marine renewable energy development	• Concerns that siting may affect surfing or recreational fishing potential
Environmental issues	• Water quality • Erosion (affecting homes campsites, roads) • Oil spill risks (from increased rail transport) • Tsunami risks
Measures to protect endangered or threatened species	• Concerns about restrictions on recreational use to protect species (e.g., snowy plovers nesting on beach)

SECTION 2 | STATUS OF THE RECREATION AND TOURISM SECTOR

To describe the current status and economic significance of the recreation and tourism sector, we rely on existing data sources and interviews with sector experts; we did not conduct a formal survey or collect new information. This section summarizes the data available. It is important to note, however, that in support of MSP in Washington, the Surfrider Foundation and Point 97 are currently conducting a survey of non-extractive recreational use in the study area.[3] The results of this survey are not available at this time, but will provide better information on the nature and economic impacts of the recreation and tourism sector. The survey will address several of the major data gaps identified in Section 4.

RANGE OF ACTIVITIES

The recreation and tourism activities that occur along Washington's Pacific coast include both non-extractive activities associated with use or enjoyment of the ocean and extractive activities, such as fishing, crabbing, and clamming.[4] As Exhibit 2-1 indicates, the nature of these activities is wide-ranging.[5]

Detailed information on participation in recreation activity along the Washington coast is not currently available. A recent study, however, collected data on recreation along the Oregon coast. Despite some important differences (e.g., driving is not generally allowed on Oregon beaches, while it is allowed on Washington's southern beaches), the results of the Oregon study provide some insight into popular coastal recreational activities in the Pacific Northwest. The Oregon survey indicates that beach going and scenic enjoyment were by far the most popular activities (LaFranchi 2011).

[3] Surfrider Foundation and Point 97 have recently launched a survey to document the recreational use of Washington's coast. The study will document the location and type of public recreation from Ilwaco to Port Angeles and provide better estimates of the value of this recreation to the state's economy. The survey aims to collect data for numerous recreational uses, including kayaking, surfing, birding, camping, and clamming. The survey does not address recreational fishing or crabbing (Personal comm. with C. Hennessey 2014).

[4] Recreational fishing, shellfishing, and crabbing activities are described in greater detail in a separate report on the fishing sector.

[5] Most of these activities are among those to be addressed in the Surfrider survey.

EXHIBIT 2-1. RECREATION ACTIVITIES ALONG WASHINGTON'S PACIFIC COAST

ACTIVITIES
Wildlife viewing - watching birds, whales, seals, and/or other marine life (from shore or boat)
Beach going (sitting, walking, running, dog walking, kite flying, etc.)
Scenic enjoyment/sightseeing
Fishing/Crabbing (by boat or from shore)
Clamming
Camping
Tide pooling
Collecting/picking/harvesting other sea life from shore (seaweed, mussels, etc.)
Beachcombing/Collecting non-living resources (e.g., agates, beach glass, driftwood)
Hiking/Biking
Surfing (from board or kayak)
Kite boarding
Windsurfing
Skim boarding
Kayaking or other paddling activity (canoe, stand up paddleboard, Tribal canoe journey)
Coastal tribal event
Driving on beach (Road vehicle, off-road vehicle, kite car)
Horseback riding
Swimming or body surfing
Free diving/snorkeling (from shore or boat)
SCUBA diving (from shore or boat)
Boating/Sailing (own boat or charter boat)
Photography
Hang gliding/parasailing
Other

In a statewide survey of Washington residents conducted in 2012, the outdoor recreation activity with the highest participation rate is walking/hiking/climbing/mountaineering (90 percent of residents participating), followed by other recreational activities (encompassing team and individual sports, fitness activities, swimming, roller and inline skating, and skateboarding), with 83 percent participation. A category identified as nature activities (which includes visiting nature centers, wildlife viewing, gathering/collecting things, and gardening) ranks third among Washington residents, with 81 percent participating. The survey also indicates that eight out of ten Washington residents visited a county, city, state, or federal park in the past year. This includes 58 percent who visited a state park and 38 percent who visited a national park (RCO 2013). Further, the study shows a dramatic increase in participation in many nature-based activities since the last survey in 2002, including increases in fishing for shellfish, visiting a nature interpretive center, and camping in a primitive location (RCO 2013).

Limited information is available to describe where recreational activity within the study area currently takes place. Many activities are likely to be widespread. Several, however, are limited to specific locations. For example, horseback riding and driving on the beach only occur on the southern beaches. In addition, anecdotal evidence indicates

that recreational fishing primarily occurs along the southern coast – with roughly 70 percent originating from Westport and Ilwaco/Chinook, and the remaining 30 percent originating from La Push and Neah Bay (Personal comm. M. Cedergreen 2014).

AVAILABLE STATISTICS

Data on economic activity specifically related to ocean-derived recreation and tourism within the study area are not currently available.[6] A number of relevant sources, however, provide data related to recreation and tourism along the Washington Pacific coast, as well as for activities of interest statewide. The discussion that follows presents this information. It begins with an overview of existing recreation and tourism sites by county. It then summarizes available statistics that are useful for understanding the economic significance of the recreation and tourism sector.

RECREATION/TOURISM SITES BY COUNTY

Exhibit 2-2 lists recreation facilities such as parks, marinas, and resorts by county along Washington's Pacific coast, Although this inventory is likely to be incomplete, it provides some insight to the distribution of recreation and tourist infrastructure within the study area. In addition, it is important to note that some developed municipalities inland or along the Strait of Juan de Fuca, such as Forks and Port Angeles, also provide infrastructure for ocean-derived recreation activity. For example, the nearest surf shop to the northern coastal surf breaks is in Port Angeles.

In addition to this inventory of sites, we collected limited data including both readily available and anecdotal information on room rates and typical expenditures in coastal locations. For example, motel rooms and cabins at the Quileute Oceanside resort range from $69 to $299 per night depending on size and season (Personal comm. Quileute Tribe 2014). Anecdotal information indicates that in the Ocean Shores area, room rates range from $60 - $250 per night; and the typical expenditure for a person attending a convention in Ocean Shores is approximately $300 per day, including lodging, food, and other expenditures (Personal comm. M. Plackett 2014). Similarly, a typical visitor to Long Beach is estimated to spend about $300 per day (Personal comm. A. Day 2014).

[6] Surfrider Foundation and Point 97 are currently conducting a recreation use survey in support of Washington's marine spatial planning efforts that will provide data specific to our study area – preliminary results are expected to be available in December 2014, with the final report due June 2015.

EXHIBIT 2-2. RECREATION SITES ALONG WASHINGTON'S PACIFIC COAST

LANDOWNER/RECREATION SITE
CLALLAM COUNTY
Makah Tribe:
Hobuck Beach Resort
Makah Marina (Neah Bay)
Cape Flattery (maintained trail to NW tip of U.S.)
Olympic National Park: [1]
Lake Ozette Campground (15 campsites)
Mora Campground (94 campsites)
Wilderness Campsites: Shi Shi Beach, Seafield Creek, N. Ozette River, S. Ozette River, Cape Alava, Wedding Rocks, Sand Point, South Sand Point, Yellow Banks, Norwegian Memorial, Cedar Creek, Chilean Memorial, Hole-in-the-Wall
Quileute Tribe: [2]
Quileute Oceanside Resort • Campsites: 24 RV sites, 42 tent or RV • Hotel: 25 motel/42 cabin units
Quileute Marina (95 slips)
JEFFERSON COUNTY
Olympic National Park: [1]
Kalaloch Lodge
Kalaloch Campground (170 campsites)
Queets Campground (20 campsites)
South Beach Campground (55 campsites)
Wilderness Campsites: Second Beach, Third Beach, Scott Creek, Strawberry Point, Toleak Point, Mosquito Creek
Quinault Nation:
Quinault Beach Resort and Casino
GRAYS HARBOR COUNTY
Grays Harbor National Wildlife Refuge
State Parks:
Pacific Beach (22 standard sites, 42 utility sites, 2 yurts)
Griffiths-Priday (day use)
Ocean City (149 standard sites, 29 full utility sites)
Damon Point (day use)
Westhaven (day use)
Westport Light (day use)
Oyhut Wildlife Recreation Area
Twin Harbors Beach (219 tent, 42 utility, 1 group, 2 yurts)
Coastal Towns/Cities:
Seabrook[3] (150 cottage rentals)
Moclips

LANDOWNER/RECREATION SITE
Pacific Beach
Copalis Beach
Grays Harbor
Aberdeen
Hoquiam
Ocean Shores (1,500 hotel rooms[4])
Westport • Marina:[5] 600 slips
Boat Ramp at Westport Marina
PACIFIC COUNTY
Willapa Bay National Wildlife Refuge
State Parks:
Grayland Beach (96 utility, 4 standard, 16 yurts, 4 primitive sites)
Fort Columbia (2 vacation houses)
Leadbetter Point (day use only)
Pacific Pines (day use only)
Loomis Lake (day use only)
Cape Disappointment (137 standard, 78 utility, 14 yurts, 5 primitive sites, 3 cabins, 1 boat ramp)
County/Local Parks:
Moorehead County Park
Bruceport County Park
Bush Pioneer County Park
Coastal Towns/Cities:
North Cove
Tokeland
Long Beach
Seaview
Ilwaco
Notes: This overview is based on available data; not intended to be a complete inventory. **Sources**: 1. Olympic National Park 2014. 2. Personal comm. Quileute Tribe 2014. 3. Seabrook 2014. 4. Personal comm. M. Plackett 2014. 5. Port of Grays Harbor 2014. 6. WSPRC 2014.

EXISTING DATA RELATED TO RECREATION AND TOURISM'S ECONOMIC IMPACT

This section summarizes available information regarding economic activity in the recreation and tourism sector along Washington's Pacific coast. It includes a discussion of the economic impacts of the sector overall, as well as more detailed information on recreational boating and on activity at national wildlife refuges, national parks, and state parks, as well as activity on tribal lands.[7]

General Recreation/Tourism Data

Several sources provide state level data that are indicative of the economic importance of the recreation and tourism sector. As described below, the most informative of these sources are the National Ocean Economics Program (NOEP); the National Survey of Fishing, Hunting, and Wildlife-Associated Recreation; and an annual analysis of travel impacts prepared by Dean Runyan Associates for the Washington Tourism Alliance.

National Ocean Economics Program (NOEP) Data

The first data source is the NOEP tourism and recreation sector ocean economy data, available on the Center for the Blue Economy website (NOEP 2014). The ocean economy is defined by NOEP as including all economic activity that derives all or part of its inputs from the ocean (Colgan 2007). As shown in Exhibit 2-3, these data indicates that in 2011, the tourism and recreation sector contributed $3.4 billion (33 percent) to Washington state's ocean economy. Exhibit 2-4 illustrates county-level data available from this source.

These ocean tourism and recreation data include establishments that are either (1) included in specific industries with activity explicitly tied to the ocean, or (2) located in a shore-adjacent zip code. An important limitation of these data for our purposes is that NOEP treats the Puget Sound and Columbia River mouth as part of the ocean; thus relevant recreation and tourism activity in shoreline-adjacent zip-codes throughout the Puget Sound (including portions of Seattle and Tacoma) is included in state totals. As a result, the four Pacific Ocean counties combined are only a small portion of the state total ocean economy as defined by NOEP which is likely dominated by the heavier economic activity in more developed areas such as Seattle and Tacoma. Specifically, the four counties combined contribute 12 percent of ocean economy establishments and seven percent of ocean economy gross domestic product (GDP) in 2011 based on the data shown in Exhibit 2-3. Combined ocean economy GDP output for the four counties tourism and recreation sector was estimated at approximately $227 million in 2011. In 2011, the most recent year for which NOEP data are available, ocean economy county-level tourism and recreation employment ranged from 728 jobs in Pacific County to over 2,200 jobs in Clallam County. In addition, ocean economy wages from this sector in the four counties totaled nearly $94 million.

[7] Anecdotal information indicates that recreational fishing is one of the key drivers of visitation to Washington's Pacific coast, particularly the southern coastal area. A separate report on the fishing sector summarizes available statistics on the recreational fishing industry.

EXHIBIT 2-3. NOEP OCEAN ECONOMY STATISTICS: TOURISM & RECREATION SECTOR (2011)

ECONOMIC STATISTIC	COUNTY				WASHINGTON STATE
	CLALLAM	GRAYS HARBOR	JEFFERSON	PACIFIC[1]	
Establishments[2]	238	178	115	112	5,200
Employment[3]	2,282	1,537	1,065	728	66,821
Wages[4]	$41,657,000	$22,729,000	$18,468,000	$11,041,741	$1,347,181,363
GDP[5]	$96,672,000	$59,316,000	$44,216,000	$27,023,665	$3,388,993,050

Notes: All data in 2011$. Industries included in the NOEP tourism & recreation sector include Amusement and Recreation Services (not elsewhere classified), Boat Dealers, Eating & Drinking Places, Hotels & Lodging Places, Marinas, Recreational Vehicle Parks & Campgrounds, Scenic Water Tours, Sporting Goods Retailers, and Zoos & Aquaria. These industries are defined as ocean only if their locations are "Near shore," which is defined as being located in zip codes adjacent to the shoreline.

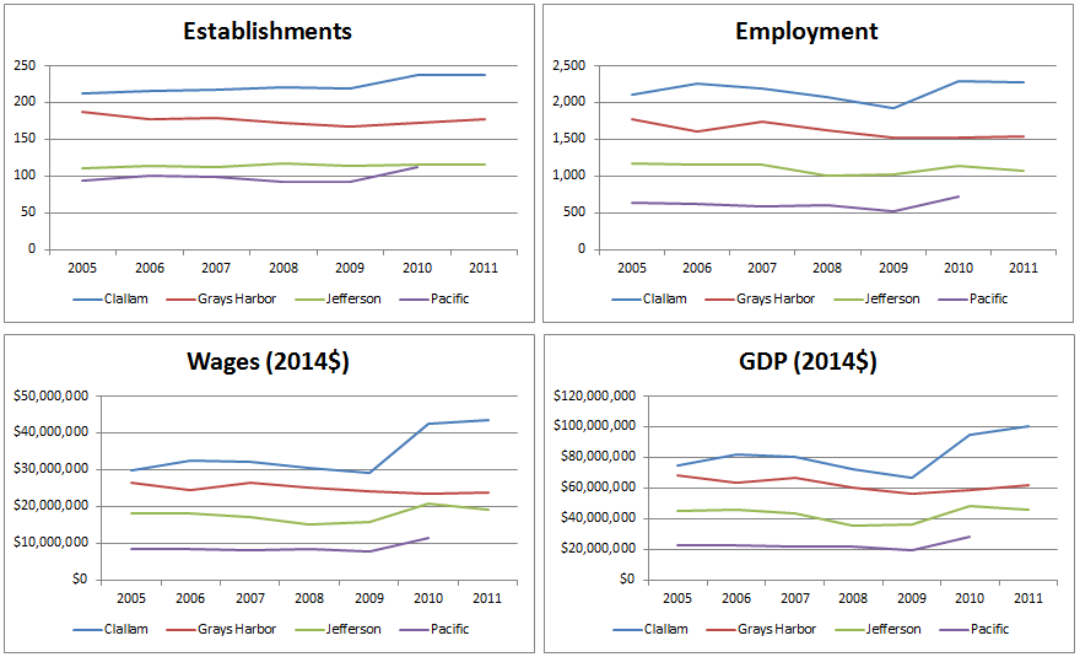
1. Disclosure issues prevented Pacific County data from being reported in 2011; 2010 data are reported in 2011$.
2. Establishments represent places of business/work.
3. Employment measures annual average jobs by place of work. It does not distinguish between full-time and part-time jobs, or year-round and seasonal jobs. It is based on employer-reported data and does not include self-employed persons.
4. Wages represent annual total earnings by workers.
5. GDP represents the total market value of goods and services produced.

Source: NOEP 2014. Ocean Economy Data for Tourism & Recreation.

The NOEP data indicate that for the most part, the number of establishments and employment in the tourism and recreation sector in the four counties has been relatively stable from 2005 through 2011, with the exception of 2009 to 2010 when Clallam county employment increased sharply, along with wages and gross domestic product (GDP) in that county.[8] Of the four counties, Clallam County contributes the most to the ocean economy, while Pacific County contributes the least, about one-third as much as Clallam County when measured in terms of GDP contribution to the ocean economy. It is also important to note that the county-level data also overstate results for our study area. For example, Clallam County is home to the most populated city on the Olympic Peninsula -- Port Angeles, the headquarters for the Olympic National Park. Similarly, Jefferson County results include recreation and tourism activity occurring Port Townsend, a popular tourist destination at the northeastern tip of the Olympic Peninsula (outside of the study area).

[8] The sharp increase in activity in Clallam County may be connected to the Elwah River Restoration work in the Port Angeles area. Several large scale construction projects beginning in 2008 created significant employment which may have contributed to increased hotel and restaurant activity. For more information see: http://www.nps.gov/olym/naturescience/dam-removal-blog-201109.htm and http://www.nps.gov/olym/naturescience/water-treatment-overview.htm.

EXHIBIT 2-4. NOEP OCEAN ECONOMY COUNTY-LEVEL DATA: TOURISM & RECREATION SECTOR (2005-2011)



Note: Disclosure issues prevented Pacific County data from being reported in 2011.
Source: NOEP 2014.

Dean Runyan Travel Impacts and Visitor Volume

For the Washington Tourism Alliance, Dean Runyan Associates prepares an annual analysis of travel impacts. The analysis employs a proprietary regional travel impact model to estimate spending by those traveling to and within the state, as well as the impact of this spending on earnings, employment, and tax revenue. Travel impacts statewide are significant, resulting in nearly $17 billion in direct spending, and contributing more than $1.0 billion in total tax receipts statewide. Exhibit 2-5 provides the most recent county-level data available. These data indicate that of the four counties in the study area, Grays Harbor has the highest travel impact, with respect to visitation, travel spending and related earnings and employment, followed by Clallam County. Direct spending impacts were significant in the four counties, ranging from $116 million to $302 million, while employment generated by travel spending ranged from 1,440 jobs in Jefferson County to nearly 5,790 jobs in Grays Harbor County. Earnings generated by travel spending ranged from $28 million in Jefferson County to $98 million in Grays Harbor County in 2012.

The main limitation of these data is that the county level includes much broader areas than the coast. Further, general travel expenditures may not be representative of visitors participating in recreational and tourism activity deriving from the ocean.

EXHIBIT 2-5. DEAN RUNYAN - TRAVEL IMPACTS AND VISITOR VOLUME (2012)

ECONOMIC STATISTIC	COUNTY				WASHINGTON STATE[5]
	CLALLAM	GRAYS HARBOR	JEFFERSON	PACIFIC	
Party-Trips (thousands)	469	592	256	274	Not available
Spending ($millions) [1]	$212.3	$302.3	$116.2	$134.7	$16,917
Earnings ($millions) [2]	$62.2	$98.5	$28.0	$35.8	$4,747
Employment [3]	3,240	5,790	1,440	1,910	153,300
Local Tax Receipts ($thousands)	$3,959	$5,779	$2,091	$1,760	$388,000
State Tax Receipts ($thousands)	$10,908	$14,259	$5,855	$5,705	$674,000
Total Tax Receipts ($thousands)[4]	$14,867	$20,037	$7,946	$7,466	$1,062,000

Notes:
1. Total direct travel spending.
2. Industry earnings generated by travel spending.
3. Industry employment/jobs generated by travel spending.
4. Local and state government tax revenue generated by travel spending.
5. Party-trips cannot be aggregated to get state-level results because visitors may visit more than one county.

Source: Dean Runyan Associates 2013.

Recreational Boating Information

Several sources provide data that are indicative of the economic importance of the recreational boating in the study area. These include boating sales data based on boat registration data from the Washington State Department of Licensing, as well as a recent study on the economic impact of recreational boating statewide.

Retail Boating Sales Data

Washington Sea Grant Program tracks retail boat sales based on data provided by the Washington Department of Licensing. Exhibit 2-6 provides boat sales by county and for the state overall. Total boat sales over the past three years have averaged approximately 1,700 units per year for the four coastal counties, or roughly five percent of total state boat sales. Clallam County has the highest sales of the four counties.

EXHIBIT 2-6. BOAT SALES BY COUNTY (UNITS SOLD)

COUNTY	2011	2012	2013
Clallam	711	701	628
Grays Harbor	491	486	472
Jefferson	385	353	431
Pacific	154	158	133
Four-county subtotal	1,741	1,698	1,664
State total	36,977	37,069	37,472

Notes: Boat sales include the following categories of sales: New Dealer, New Import (current WA resident registers new boat from an out of state dealer), Used Dealer, Used Dealer Import, Used Private, and Used Import (current WA resident registers used boat purchased out of state).

Source: Washington Sea Grant 2014.

We note that these data represent boats registered in the state or county at the time of the sale. Many boats, however, are trailered to other locations for use; thus, these data are not a necessarily indicative of boat usage in the study area. Exhibit 2-7 provides statewide information for boat sales by the source of the sale; these sales dollar figures are not available by county. Private boat sales dominate total sales in terms of units sold, while dealer sales (new or used) generate the highest dollar values. Boat sales totaled $451 million statewide in 2013.

EXHIBIT 2-7. STATEWIDE BOAT SALES BY SOURCE OF SALES (UNITS SOLD/DOLLARS OF SALES)

	2011		2012		2013	
SOURCE OF SALES	UNITS	$	UNITS	$	UNITS	$
New Dealer	2,048	$81,165,110	2,308	$96,486,825	2,651	$105,530,787
New Import[(1)]	1,002	$27,134,978	1,017	$26,591,474	1,078	$32,009,503
Used Dealer	2,762	$79,143,494	2,956	$109,053,023	2,935	$102,690,795
Used Dealer Import	763	$36,668,592	726	$46,002,878	582	$41,463,454
Used Private	23,914	$89,140,833	24,101	$91,215,720	24,156	$96,780,250
Used Import[(2)]	6,488	$62,162,223	5,961	$58,542,346	6,070	$72,938,875
Total	36,977	$376,352,381	37,069	$427,892,266	37,472	$451,413,664

Notes:
1. Current WA resident registers new boat from an out of state dealer.
2. Current WA resident registers used boat purchased out of state.

Source: Washington Sea Grant 2014.

Economic Impact of Recreational Boating in Washington

Exhibit 2-8 presents information from a study by the National Marine Manufacturers Association on the economic impact of recreational boating throughout the state of Washington (National Marine Manufacturers Association 2013). These data indicate that recreational boating provides substantial economic benefits to the state as a whole, as well as to Congressional District 6 (which includes Clallam, Grays Harbor, and Jefferson counties, as well as communities outside the study area). The report, however, provides little information on how these economic impact figures were calculated, does not include information on Pacific County, and reports results at a relatively high geographic level (i.e., statewide and congressional district). These considerations limit its usefulness for MSP purposes.

EXHIBIT 2-8. ECONOMIC SIGNIFICANCE OF RECREATIONAL BOATING IN WASHINGTON (2012)

REGION	NUMBER OF RECREATIONAL BOATS	BUSINESSES	TOTAL JOBS	ANNUAL SPENDING (MILLIONS)	ANNUAL ECONOMIC IMPACT (MILLIONS)
Washington State	254,775	1,427	25,585	$1,300.0	$3,180.0
Congressional District 6	32,866	234	3,709	$188.7	$454.0

Notes:
1. District 6 includes Grays Harbor, Jefferson, and Clallam counties, as well as others.
2. District 3 (which includes Pacific County, as well as others) is not reported in this source.

Source: National Marine Manufacturers Association 2013.

National Wildlife Refuge (NWR) Economic Impacts

While there are several NWRs in the study area, only two on the mainland are open for visitation: Willapa Bay NWR and Grays Harbor NWR. Three NWRs located offshore (Flattery Rocks, Quillayute Needles, and Copalis) are open to wildlife observation by boat but public access on the islands is not permitted. A recent study estimates the economic impact of visits to the Willapa Bay NWR (Carver and Caudill 2013). The study estimated these impacts by combining expenditure data from the FWS National Survey of Fishing, Hunting, and Wildlife Associated Activity with visitation data for the Willapa Bay refuge. Exhibit 2-9 presents the results. As the exhibit indicates, the annual spending associated with activity at this single NWR is estimated at approximately $1.8 million per year, accounting for the addition of 21 jobs, $720,000 in labor income, and $2.6 million in final demand to the region's economy.[9]

[9] The expenditure data upon which this analysis was based was derived from surveys of expenditures at other refuges; thus, the results may not be truly representative of the impact of expenditures at Willapa Bay NWR.

EXHIBIT 2-9. WILLAPA NATIONAL WILDLIFE REFUGE (2011)

RECREATIONAL ACTIVITY	TOTAL VISITS [1]	TOTAL EXPENDITURES [2]	TOTAL ECONOMIC EFFECTS		
			FINAL DEMAND	JOBS	JOB INCOME
Non-Consumptive	113,850	$1,767,300	n/a	n/a	n/a
Hunting	680	$52,500	n/a	n/a	n/a
Fishing	150	$5,900	n/a	n/a	n/a
All Recreation	114,680	$1,825,700	$2,563,300	21	$719,800

Notes: n/a = not available at the recreational activity level.
1. Visitation data are taken from the Willapa Bay NWR's annual performance plan (2011 data), based on fee collection, traffic counter, and other methods.
2. Expenditure data from 2012 FWS National Survey of Fishing, Hunting, and Wildlife-Associated Recreation.

Source: Carver and Caudill 2013.

Olympic National Park Economic Impact

There are several available sources that describe the level of visitation and economic impacts associated with Olympic National Park (ONP). First, ONP collects data on visitation; these data are available for specific sites within the park, including some sites within the area of interest. These visitation data are summarized in Exhibit 2-10. ONP estimates that visitation for the three districts encompassed in the study area (Mora, Kalaloch, and Ozette) ranged from approximately 759,000 to 783,000 visitors each year for the past three years, while parkwide visitation was roughly between 2.8 to 3.1 million each year (Olympic National Park 2014).

A 2001 visitor survey collected expenditure data and demographic information from park visitors (Ormer 2001); the results of this survey are presented in Exhibit 2-11. On average, visitors spend a total of $394 (2000$) per group including expenditures in and out of the park.

EXHIBIT 2-10. OLYMPIC NATIONAL PARK - RECREATIONAL VISITORS TO COASTAL DISTRICTS AND SELECT SUB-DISTRICT SITES

AREA	2011	2012	2013
Mora District	254,780	277,873	257,113
Rialto Beach	139,989	152,677	141,271
2nd + 3rd Beach	104,992	114,508	105,953
Kalaloch District	445,541	444,669	468,470
Concessioner Lodging	38,002	36,028	31,771
Trail Users	322,363	343,187	363,527
Ozette District	58,323	60,412	54,933
Shi-Shi Beach	31,811	31,630	29,741
Trail Users	31,812	31,630	29,455
Coastal Sites Total	**758,644**	**782,954**	**780,516**
Entire Park	**2,966,502**	**2,824,908**	**3,085,340**

Notes: Recreational visitor estimates are based on traffic counters and district-specific assumptions about persons-per-vehicle. Visitors can be double-counted across districts and across sub-district sites if a visitor visits multiple locations.
Source: NPS 2014.

EXHIBIT 2-11. OLYMPIC NATIONAL PARK: VISITOR GROUP EXPENDITURES PER VISIT (2000)

EXPENDITURE CATEGORY	AMOUNT (2000$) [1]
Visitor Group Expenditures In and Out of the Park:	
Average	$394
Median	$190
Visitor Group Expenditures In the Park:	
Average	$165
Median	$35
Visitor Group Expenditures Out of the Park:	
Average	$300
Median	$138

Notes:
1. Based on a sample of 850 respondents. 11 percent of visitor groups had total expenditures greater than $1,000, which accounts for the much higher average figures.

Source: Ormer 2001.

The third ONP data source utilizes data from the visitor survey and applies an input-output model (the Money Generation Model) to calculate an overall economic impact estimate for the park (Stynes et al. 2001). These results are summarized in Exhibits 2-12 and 2-13. This study indicates that total direct spending by the estimated 3.3 million visitors is $89.5 million (2000$). Nearly half of this spending is generated by visitors staying in motels outside the park, who spent approximately $197 per party per night.

While the visitor survey and this study allow a glimpse into the economic impacts of ONP as a whole, these studies do not provide information specific to the study area. In addition, these data may be outdated if expenditure or visitation patterns have changed since the survey was conducted in 2000.

EXHIBIT 2-12. OLYMPIC NATIONAL PARK: VISITS AND SPENDING BY SEGMENT (2000)

SEGMENT/LODGING TYPE	RECREATION VISITS (000'S)	PARTY NIGHTS (000'S)	AVG SPENDING ($ PER PARTY PER NIGHT)	TOTAL SPENDING ($ MILLIONS)
Local Day User	798	213	$27.66	$5.9
Non-Local Day Trips	1,361	408	$45.21	$18.4
Lodge-Inside Park	78	23	$244.13	$5.5
Camp-Inside Park	180	78	$49.66	$3.9
Backcountry Campers	78	41	$23.97	$1.0
Motel-Outside Park	692	247	$197.41	$48.8
Camp-Outside Park	141	79	$76.31	$6.0
Total	3,328	1,089	$82.26	$89.5

Source: Stynes et al. 2001.

EXHIBIT 2-13. OLYMPIC NATIONAL PARK: ECONOMIC IMPACTS OF VISITOR SPENDING (2000)

SECTOR/SPENDING CATEGORY	DIRECT SALES ($000'S)	JOBS	PERSONAL INCOME ($000'S)	VALUE ADDED ($000'S)
Direct Effects				
Motel, Hotel Cabin or B&B	$26,939	620	$11,052	$17,631
Camping Fees	$2,152	50	$883	$1,408
Restaurants & Bars	$21,181	673	$7,425	$10,654
Admission & Fees	$5,373	156	$2,198	$3,610
Local Transportation	$3,970	93	$1,877	$2,366
Retail Trade	$9,642	269	$5,020	$8,173
Wholesale Trade	$1,494	18	$576	$1,022
Local Production of Goods	$1,010	2	$45	$81
Total Direct Effects (1)	**$71,759**	**1,881**	**$29,077**	**$44,945**
Total Indirect Effects (2)	**$26,732**	**409**	**$9,566**	**$16,802**
Total Effects (3)	**$98,491**	**2,290**	**$38,643**	**$61,748**
Multiplier (4)	1.37	1.22	1.33	1.37

Notes:
1. Direct effects represent production changes associated with demand for goods and services.
2. Indirect effects represent secondary activity caused by directly affected industries purchasing goods and services from other industries.
3. Here, total effects represent the sum of direct and indirect effects.
4. The multiplier captures the secondary activity in the marketplace (i.e., indirect effects) caused by the direct effects of visitor spending. Multiplying the estimate of direct effects by the multiplier produces an estimate of total effects. Multiplying the estimate of direct effects by the sum of the multiplier minus one produces an estimate of indirect effects.

Source: Stynes 2001.

Washington State Parks Economic Data

Visitation, revenue, and expenditure data for various state park units within the study area were provided by the Washington State Parks and Recreation Commission (WSPRC). Exhibit 2-14 summarizes these data for 2013. WSPRC tracks visitation at state parks, ocean beach approaches (OBAs) and at access points for seashore conservation areas (SCAs).[10] These data may include some double-counting, but still provide a gauge for the level of visitation to the area over time.

[10] We note that these visitation estimates are based on traffic counters at state park entrances and an assumed factor of 3.5 persons per vehicle. As such, there is potential that visitors may be double-counted (e.g., if the same cars enter more than once, or are counted at multiple locations). The assumption of 3.5 visitors per vehicle may also over- or under-state visitation.

EXHIBIT 2-14. WASHINGTON STATE PARKS - ANNUAL DATA FOR PACIFIC COAST REGION (2013)

LOCATION	VISITATION TOTAL [1]	FULL-TIME EMPLOYEES	TOTAL REVENUE [2]	TOTAL OPERATING EXPENDITURES
North Beach Area Parks (Grays Harbor County)				
Ocean City	479,807	3.9	$401,451	$568,900
Pacific Beach	291,306	2.82	$247,553	$304,638
Griffith-Priday	59,259	0.51	$1,807	$58,338
North Beach SCA	2,535,513	2.13	$0	$261,383
Chance A La Mer OBA	ND	ND	$626	ND
Oyehut OBA	ND	ND	$260	ND
North Jetty OBA	514,042	ND	ND	ND
Ocean City OBA	ND	ND	$1,173	ND
Subtotal:	**3,879,927**	**9.36**	**$652,870**	**$1,193,260**
South Beach Area Parks (both Grays Harbor and Pacific Counties)				
Twin Harbors	442,544	7.33	$311,743	$963,437
Grayland Beach	466,341	5.93	$662,684	$621,813
South Beach SCA	737,866	0.56	ND	$55,140
Westhaven	365,103	0	$26,220	$5,198
Westport Light	337,962	0	$1,663	$11,413
Bottle Beach Natural Area	114,592	0.07	ND	$4,582
Bonge Avenue	ND	ND	$1,664	ND
Schafer Road	ND	ND	$6,343	$0
Total:	**2,464,408**	**13.89**	**$1,010,317**	**$1,661,583**
Long Beach Area Parks (Pacific County)				
Cape Disappointment	894,314	14.58	$1,520,965	$2,187,774
Fort Columbia	67,170	0.62	$13,117	$57,033
Leadbetter Point	95,566	ND	ND	ND
Lewis & Clark Interp Center	36,382	1.91	$102,426	$178,153
Long Beach SCA	1,690,960	0.25	ND	$24,852
Vacation Housing	804	ND	ND	$28,165
Lighthouse	ND	ND	ND	$23,623
Loomis Lake	77,647	ND	ND	ND
Pacific Pines	12,793	ND	ND	ND
Ft Columbia Vacation Housing	932	ND	ND	ND
Total:	**2,876,568**	**17.36**	**$1,636,509**	**$2,499,599**
Grand Total:	**9,220,903**	**40.61**	**$3,299,696**	**$5,354,442**

LOCATION	VISITATION TOTAL [1]	FULL-TIME EMPLOYEES	TOTAL REVENUE [2]	TOTAL OPERATING EXPENDITURES

Notes:
1. Day use/park attendance is collected by vehicle counters as vehicles enter the park, and then divided by 3.5 to get visitation figures.
2. The bulk of the revenues are net camping revenues (after discounts/coupons and sales tax deducted), but these figures also include Discover Pass revenue collected at the park, and other miscellaneous revenue.

ND = Data not reported at satellite park level.
OBA = Ocean Beach Approach, serves as public access to oceanfront.
SCA = Seashore Conservation Area.
Source: WSPRC 2014.

Exhibits 2-15 and 2-16 summarize historical visitation data from 2004 to 2013. As illustrated in Exhibit 2-15, state park visitation has increased in the study area over the past ten years. Overall visitation has ranged from a low of 6.1 million visitors in 2004 to a high of 10.8 million in 2010. Visitation peaked between 2008 and 2010. In total, visitation has increased 52 percent over the ten-year period from 2004 to 2013.

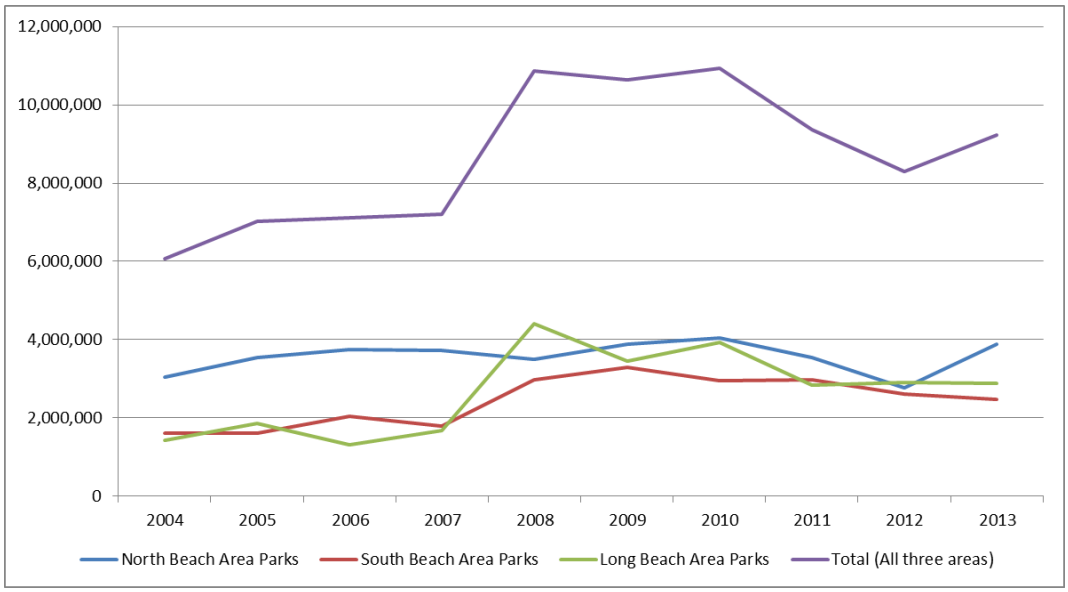
North Beach SCA and Long Beach SCA consistently have the highest visitation over the past five years, with North Beach ranging from 1.5 to 2.6 million visitors per year, and Long Beach ranging from 1.7 million to 3.0 million visitors per year. The area with the third highest visitation is either Cape Disappointment or South Beach SCA depending on the year. Cape Disappointment is a very popular state park with one of the largest campgrounds in the region. Visitation to Cape Disappointment ranged from 0.6 million to 1.5 million visitors per year over the past ten years. The South Beach SCA visitation is comparable to Cape Disappointment, ranging from 0.7 million to 1.3 million visitors.

On average, over the past five years, the South Beach SCA has accounted for 11 percent of overall state park visitation, while the North Beach SCA and Long Beach SCA account for 23 percent and 21 percent, respectively.

Total revenue data for each state park location include camping revenues, Discover Pass fees collected at that specific park location, and other miscellaneous revenues. Only certain locations have fee collections or camping areas; in general revenues are not associates with OBAs and SCAs. Five locations make up 95 percent of revenue collections and 85 percent of the FTEs associated with locations in the study area (Cape Disappointment, Grayland Beach, Twin Harbors, Pacific Beach and Ocean Beach). Of the state parks in the study area, Cape Disappointment contributes nearly half of revenues and accounts for roughly 40 percent of operating expenses in 2013. Grayland Beach has the second highest revenue collections in 2013, followed by Ocean City. In 2013, state parks in the study area employed approximately 41 FTEs. Nearly 15 of the FTEs are associated with Cape Disappointment.

Overall, operating expenditures exceed revenue contributions for state parks in the study area, but we note that revenues reported here do not include Discover Passes purchased through other means (e.g., through Department of Licensing or other offsite sales locations).

EXHIBIT 2-15. WASHINGTON STATE PARKS PACIFIC COAST REGION VISITATION



Source: WSPRC 2014.

EXHIBIT 2-16. WASHINGTON STATE PARKS PACIFIC COAST REGION - ANNUAL VISITATION DATA (2004 - 2013)

LOCATION	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
North Beach Area Parks (Grays Harbor County)										
Ocean City	263,364	194,380	314,234	281,215	339,641	548,189	469,925	482,883	602,844	479,807
Pacific Beach	159,967	229,636	224,269	229,266	164,512	201,562	192,009	163,237	155,400	291,306
Damon Point	162221	114506	135422	177825	69971	0	ND	ND	ND	ND
Griffith-Priday	0	0	0	0	0	73,930	68,678	62,723	55,206	59,259
North Beach SCA	1,921,274	2,371,445	2,594,185	2,516,054	2,513,599	2,391,401	2,636,608	2,338,498	1,502,295	2,535,513
IC- Ocean Shores	11246	10489	4033	0	0	0	ND	ND	ND	ND
North Jetty OBA	514,786	627,120	475,834	518,490	411,337	672,209	678,678	505,880	460,348	514,042
Ocean City OBA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total:	**3,032,858**	**3,547,576**	**3,747,977**	**3,722,850**	**3,499,060**	**3,887,291**	**4,045,898**	**3,553,221**	**2,776,093**	**3,879,927**
South Beach Area Parks (both Grays Harbor and Pacific Counties)										
Twin Harbors	166,908	169,337	158,018	183,278	291,104	419,701	380,450	459,155	446,315	442,544
Grayland Beach	31,274	90,431	258,091	200,818	373,815	345,824	364,971	392,989	332,023	466,341
South Beach SCA	988,558	813,421	995,995	904,900	1,017,594	1,200,753	1,272,711	1,333,481	905,679	737,866
Westhaven	220,029	288,940	418,341	345,217	953,099	786,025	474,622	646,698	500,617	365,103
Westport Light	195,367	237,755	211,784	157,235	330,141	455,765	377,390	87,437	328,768	337,962
Bottle Beach Natural Area	ND	ND	ND	ND	ND	81,680	82,007	43,345	104,867	114,592
Bonge Avenue	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Schafer Road	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total:	**1,602,136**	**1,599,884**	**2,042,229**	**1,791,448**	**2,965,753**	**3,289,748**	**2,952,151**	**2,963,105**	**2,618,269**	**2,464,408**
Long Beach Area Parks (Pacific County)										
Cape Disappointment	1,045,331	1,479,911	951,019	1,312,374	1,078,025	941,345	758,364	571,240	774,607	894,314
Fort Columbia	126,755	133,847	105,048	116,315	111,219	106,953	120,528	117,684	88,496	67,170

LOCATION	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Leadbetter Point	113,371	103,900	112,201	116,297	107,664	109,172	119,797	144,349	86,063	95,566
Lewis & Clark Interp Center	ND	ND	ND	ND	32,650	30,196	32,333	47,485	26,827	36,382
Long Beach SCA	64,267	56,560	49,502	43,030	2,970,499	2,169,081	2,820,206	1,894,172	1,852,262	1,690,960
Vacation Housing*	0	0	0	0	0	0	0	982	550	804
Loomis Lake	64,279	63,764	62,736	67,699	66,214	66,997	74,513	61,466	61,950	77,647
Pacific Pines	8,848	31,072	39,577	30,982	28,940	19,433	6,959	5,872	18,754	12,793
IC - Fort Columbia	2326	0	0	0	3144	6667	6335	2601	1,336	0
Fort Columbia Vacation Housing	1067	1095	1038	1144	1257	1589	956	1258	818	932
Total:	**1,426,244**	**1,870,149**	**1,321,121**	**1,687,841**	**4,399,612**	**3,451,433**	**3,939,991**	**2,847,109**	**2,911,663**	**2,876,568**
Grand Total:	**6,061,238**	**7,017,609**	**7,111,327**	**7,202,139**	**10,864,425**	**10,628,472**	**10,938,040**	**9,363,435**	**8,306,025**	**9,220,903**

Notes: OBA = Ocean Beach Approach, serves as public access to oceanfront.
SCA = Seashore Conservation Area.
Source: WSPRC 2014.

Recreation and Tourism on Tribal Reservation Lands

Of the five tribes with reservation lands in the study area, detailed information was only available from one, the Quileute Tribe, at the time of publication.[11]

Quileute Tribe

Recreation and tourism activity occurring on reservation lands under control of the Quileute Tribe stem primarily from visitation to the Quileute Resort and Marina or from visitors attending events.

In general, visitors to Quileute reservation lands enjoy recreation activities such as: wildlife viewing and photography, boating, coastal hiking, fishing, whale watching, kayaking, surfing, beachcombing, swimming (when the weather is warm enough), camping, and beach campfires.[12] First Beach on the reservation is a popular surf spot year-round, but primarily in the winter when bigger waves occur. In addition, whale watching is a popular activity from March through May. Gray whales stay relatively close to the coast when going north as they migrate from Mexico to Alaska. At high tide the whales may be observed very close to First Beach, perhaps 20 feet offshore. Transient orcas hunt the calves and are sometimes seen cruising along the shoreline as well. Visitors trickle in all through these months to walk the beach and watch the whales.

EXHIBIT 2-17. QUILEUTE EVENTS

EVENT	DESCRIPTION	ESTIMATED ATTENDANCE
Wednesday Night Drum Group	While the main attraction is the cultural aspect, this event is held one block from the beach and many people come for the joint benefit of beach and culture. Quileute welcomes the public to watch traditional drumming/singing and dancing. People can bring their own drum and participate in the drumming part, whether or not Quileute. This draws visitors from all over the world.	50-200
La Push Pummel (January/February)(1)	A Seattle group comes out each year to surf the high waves of the winter storms at First Beach. This group used to come out in January but switched in 2009 to February because January weather was often too severe.	About 30 paddlers plus friends and family
Welcome the Whales (mid-April)	While designed to have the tribal school make offers to the whales, this is also a cultural event for the community and the public can attend. There are prayers, singing/drumming, and a meal later at Akakat Center.	200-300 people (varies with weather)
Halibut Opener (early May)	The marina draws a huge crowd of recreational anglers for the halibut season.	200 people

[11] The Hoh reservation is very small (443 acres) and does not contain any major developed recreation areas for public use.

[12] On its website homepage, Quileute has posted its policy regarding Indian Country etiquette and photography. Unless photography is for personal use, tribal council permission is needed. See http://www.quileutenation.org for more details.

EVENT	DESCRIPTION	ESTIMATED ATTENDANCE
Surf Camp (June)	A Youth and Traditions Surf Camp is held at First Beach at the end of June, sponsored by Quileute Housing authority Youth Programs, Surfrider Foundation, and USCG.	Not available.
July 4 fireworks	Fireworks display on the night of July 4th, on the beach.	100 visitors.
Quileute Days (3rd weekend in July)	This includes the canoe races, the Royalty parade, stick games, fish bake, adult and youth co-ed softball, street vendors, bingo, and an Elders Dance. People from around the area come to the reservation to buy from vendors, play games, watch canoe races, engage in the street dances, or just enjoy the scenery.	Several hundred at parade and over three days perhaps 2,000 total.
Labor Day Coho Fishing Derby	The fishing is offshore (ocean, not river) so people bring their boats. There are vendors on the reservation. It is a judged event with small prize money for the catches.	300 people a day for three days.
The Paddle	This is an event shared by Washington and Canadian Tribes and has a different destination/host each year. Depending on distances, canoes travel 2-4 weeks in late July-early August. While only tribal members paddle, the event draws the attention of the public. When a local coastal Tribe is hosting, it can draw a lot of public attention. For example, in 2013, Quinault was a final destination, and Quileute was a mini-stop before the final one. The event includes dancing/singing/drumming and food. Many people show up to see the painted canoes as well. Over 100 drums were counted during the Quileute Hosting celebration of the Paddle to Quinault.	Forks Chamber of Commerce and area businesses helped to host several thousand people from July 27-August 1. Our kitchen estimated serving 7,000 people.
Notes: 1. See http://www.canoekayak.com/photos/pummel-la-push-washington/ for more details. **Source**: Personal comm. Quileute Tribe 2014.		

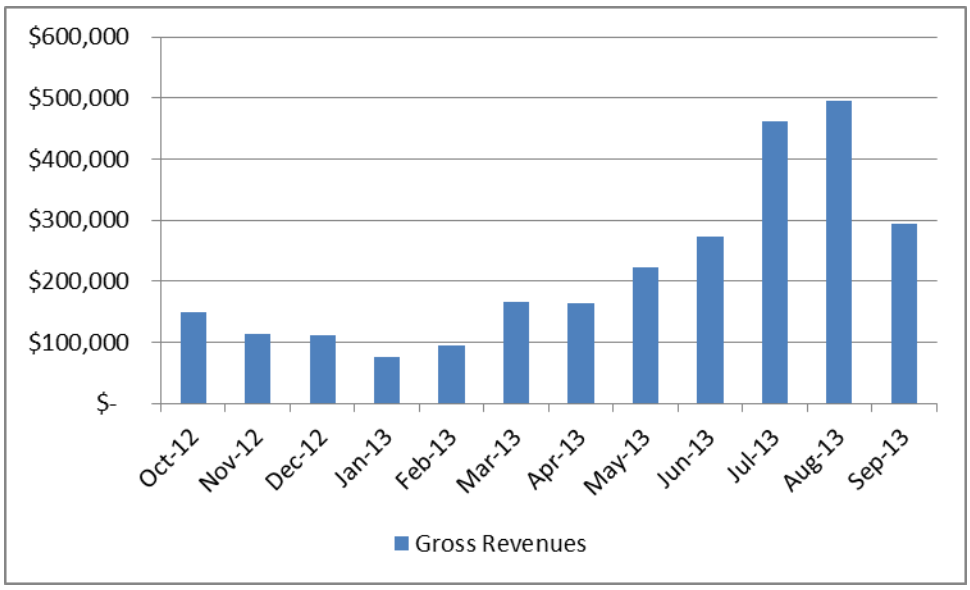
In addition to the events, visitors come to the Quileute Oceanside Resort year-round. The Tribe indicates that rooms are generally sold out during peak periods including: Christmas/New Years, Spring Break (March), and July through September. The following summarizes available accommodations and rates at the resort:

- Motel/Cabin Rooms: 28 motel units/43 cabin units, prices range from $69 to $299 per night depending on size and season.
- Camping:
    - 24 RV hookup units priced at $27 to $40 per night depending on season
    - 42 RV/tent units and 26 tent sites with no amenities, prices range from $15 to $20 per night

- Other: Fire permit $5 per day, and day parking pass $5.

The resort has a total staff of 31 active employees. Gross revenues for the resort for Fiscal Year (FY) 2013 (October 2012 – September 2013) totaled $2.6 million of which approximately $2.3 million was from motel/cabin rental and $0.3 million was from RV/tent site rentals.

EXHIBIT 2-18. QUILEUTE RESORT GROSS REVENUES – FY 2013



Source: Personal comm. Quileute Tribe 2014.

In addition to the resort, the tribe operates a marina open year-round. There are 95 slips at the marina some of which are leased to commercial and sport fishermen. The marina has two full-time and two part-time employees. Rates for the marina are as follows:

- Daily moorage rates: $15 vessels under 30 feet and $15 plus $1 per foot for vessel over 30 feet.
- Monthly rates: $190 (under 30 feet) and $290 (over 30 feet).
- Boat ramp fee is $15.

Based on information provided by the Tribe, gross revenues from the marina operations totaled approximately $417,000 for FY 2013 including primarily diesel and gasoline sales of approximately $359,000, moorage/ramp fees of roughly $53,500, and the remaining $3,500 from bait, tackle, oil and miscellaneous retail sales. (Personal comm. Quileute Tribe 2014).

The Tribe also operates a restaurant in the summer months and small store/gas station used by tourists. The restaurant employs three to five people, and the store employs three full-time and six on-call part-time staff. Tourists may spend approximately $15 per person per day on food if they are cooking in their lodging, and approximately $10 to $15

per person per meal if eating at the restaurant. Revenue from the store in FY 2013 totaled nearly $1.5 million (Personal comm. Quileute Tribe 2014).

Makah Tribe

The Makah reservation is home to Hobuck Beach Resort, which draws people for the following ocean-derived recreation activities: beach walks, surfing, photography, wildlife-watching, fishing, hiking to Shi Shi Beach or Cape Flattery, storm watching and cycling (Hobuck Beach Resort 2014). In addition, various events are held at Hobuck Beach, including Audubon events, and a surf paddling festival called the Hobuck Hoedown (Olympic Raft and Kayak 2014). A tribal recreation use permit costing $10 per vehicle is required per vehicle while visiting the Makah reservation, and a day pass for surfing, kayaking, or beach access is $15 (Hobuck Beach Resort 2014). The following summarizes rates for the resort:

- Cabins: prices range from $110 to $200 per night depending on size and season.
- Camping:
    - RV sites priced at $30 per night.
    - Tent sites $20 per tent, with a charge of $5 per extra vehicle.

Additional information regarding recreation and tourism activity and related economic impacts may be available from the Makah Tribe in the future, but was not available at the time of publication.

Quinault Indian Nation

The Quinault reservation lands include 23 miles of coastline, and have a developed casino resort across from the beach. The Quinault Beach Resort and Casino is located north of Ocean Shores in an area that offers beachside activities such as horesback riding, kite flying, beachcombing or relaxing in a room with an ocean view. The beachside resort includes a full service casino, conference facilities, RV parking, numerous dining options and a spa (Quinault Beach Resort 2014).

Shoalwater Bay Tribe

The Shoalwater Bay Tribe operates the Shoalwater Bay Casino in Tokeland, Washigton, located on north rim of Willapa Bay. The resort includes 17 suites, as well as a small casino near the beach (Shoalwater Bay Casino 2014).

EXISTING POLICIES AND LAWS

The regulatory environment affecting recreation and tourism activity along the Washington Pacific coast varies depending on the jurisdiction. Exhibit 2-19 provides a summary of key policies and laws important to recreation and tourism activity in the study area.

EXHIBIT 2-19. SUMMARY OF KEY POLICIES, LAWS AND GUIDANCE

POLICY/LAW/ GUIDANCE	RESPONSIBLE AGENCY	DESCRIPTION	RELEVANT LINKS
FEDERAL			
Olympic Coast National Marine Sanctuary Regulations	NOAA's Marine Sanctuary Program	Sanctuary regulations are in place primarily to protect recreational use, rather than to restrict it. There are restrictions, however, on certain activities, including overflights; discharging any material within the boundary of the Sanctuary; and taking any marine mammal, sea turtle or seabird in or above the Sanctuary.	http://olympiccoast.noaa.gov/protect/regulations/regulations.html
Boating Regulations	USCG	Recreational boat owners operating in U.S. waters must comply with federal regulations on vessel registration and documentation, as well as requirements pertaining to equipment, operating procedures (navigation rules), and boating under the influence.	http://www.uscgboating.org/assets/1/workflow_staging/Publications/420.PDF
Olympic National Park Regulations	NPS	Regulations specific to ONP, as specified in the Superintendents Compendium, include but are not limited to public use limits, closure of areas to use, activities that require a permit, fishing regulations, camping regulations, conditions for fires, sanitation and refuse, pets, horses, alcoholic beverages, and speed limits (NPS 2014a). Federal regulations covering all NPS lands are contained in CFR Title 36, Chapter 1.	http://www.nps.gov/olym/parkmgmt/lawsandpolicies.htm
Coastal Zone Management Act	NOAA (authority delegated to Ecology)	Passed in 1972, the CZMA is intended to meet the challenges of continued growth in the coastal zone. It sets forth a national policy to "preserve, protect, develop, and where possible, to restore or enhance, the resources of the Nation's coastal zone for this and succeeding generations."	http://coastalmanagement.noaa.gov/about/czma.html#section303
STATE			
Shoreline Management Act (SMA) (RCW 90.58)/Shoreline Master Program Guidelines	Ecology, Washington Coastal Zone Management Program	The SMA includes three broad policies designed to encourage water-dependent uses, protect shoreline natural resources, and promote public access. The overarching goal of the Shoreline Management Act is to "prevent the inherent harm in an uncoordinated and piecemeal development of the state's shorelines." Shoreline master programs are local land use policies and regulations designed to manage shoreline use. The Shoreline Master Program Guidelines, developed by Ecology, provide the state standards to which local governments must adhere in developing their shoreline master programs.	http://www.ecy.wa.gov/Programs/sea/shorelines/smp/index.html http://www.ecy.wa.gov/programs/sea/sma/st_guide/intro.html http://www.ecy.wa.gov/programs/sea/sma/guidelines/index.html
Seashore Conservation Act	WSPRC	Intertidal lands along the open coast are generally protected under the Seashore Conservation Act (RCW 79A.05.600).	http://law.justia.com/washington/codes/2005/title79a/79a.05.600.html

POLICY/LAW/ GUIDANCE	RESPONSIBLE AGENCY	DESCRIPTION	RELEVANT LINKS
Aquatic Lands Act	DNR	DNR leases publicly-owned tidelands for uses consistent with the priorities set forth in the Aquatic Lands Act, and uses some of the revenue generated from these leases to provide public access to state-owned aquatic lands (RCW 79.105).	http://washington.statelawyers.com/Statutes/Index.cfm/StateID:47/ID:6003
Recreation and Conservation Funding Board	Washington Recreation and Conservation Office (RCO)	The funding board and RCO's mission is five-fold: (1) to meet the recreational needs of Washington's citizens; (2) to represent the interest of the state on recreational issues; (3) to administer recreational grants and provide technical assistance; (4) to encourage regional coordination and interaction between public and private organizations; and (5) to serve as a repository for recreation-related data (RCW 79A.25). The Board must approve conversion of state marine recreation land to other uses.	http://apps.leg.wa.gov/rcw/default.aspx?cite=79A.25
Boating Regulations	DFW, State Park Rangers, Washington Department of Licensing, WSPRC	State regulations regarding navigating on Washington wasters apply to all recreational vessels used on state waters (WAC 352-60). These regulations apply to vessel equipment and operation. Washington's 2005 boater education law requires all boaters 59 years of age and under operating a powered watercraft of 15hp or greater to take a safety education course and obtain a Boater Education Card to operate a boat in Washington. In addition, all vessels navigating, operating, moored, or employed in Washington must be registered in Washington, with certain exceptions (i.e., canoes, kayaks, not propelled by motor or sail, registered in another state using Washington waters for 60 days or fewer).	http://boat.wa.gov/regulations.asp
LOCAL			
Seashore Conservation Area Regulations	WSPRC	Requires local governments which have a portion of the Seashore Conservation Area within their boundaries to prepare recreation management plans for their ocean beaches, designating at least 40 percent of the beach for use by pedestrians and non-motorized vehicles from April 15 to the day following Labor Day of each year (WAC Chapter 352-37).	http://apps.leg.wa.gov/wac/default.aspx?cite=352-37
Shoreline Master Program (Guidelines at WAC 173.26)	Multiple County and Town governments	Shoreline master programs are local land use policies and regulations designed to manage shoreline use. They typically encompass a comprehensive plan, zoning ordinance and development permit system. Shoreline master programs may include use standards, as well as requirements for substantial development permits and conditional use permits.	http://www.ecy.wa.gov/Programs/sea/shorelines/smp/index.html

POLICY/LAW/ GUIDANCE	RESPONSIBLE AGENCY	DESCRIPTION	RELEVANT LINKS
TRIBAL			
Various Tribal Regulations	Various Tribal Entities	Visitors to tribal reservations are subject to the rules and regulations of the tribal authorities governing the reservation. For example, visitors to the Quileute reservation must obtain tribal council permission for photography unless photography is for personal use.	http://www.quileutenation.org/qtc/media_policy_2010.pdf

SECTION 3 | ISSUES FACING THE RECREATION AND TOURISM SECTOR

There are a number of potential issues facing the recreation and tourism sector. None of these issues, however, appear to be particularly contentious at this time. This section discusses each of the following concerns:

- Issues concerning access to recreation sites;
- Concerns about potential marine renewable energy development;
- Environmental issues; and,
- Conflicts with measures to protect endangered species.

ACCESS ISSUES

Along the Washington coast, there are a variety of factors that can affect users ability to access recreation sites. Issues such as the availability of sites to meet recreational demand, overcrowding resulting from increased popularity or population growth, increased costs to participate in recreation, and increased traffic affecting access to the coast may affect the recreation and tourism industry. In general, the northern section of the coast has few access points, but there has not been any major change in the availability of access to the ocean, and none is expected (Personal comm. C. Dennehey 2014). Restrictions have been enacted at beaches along the Quinault reservation, limiting access to beaches and surf spots to Quinault tribal members only (Bruscas 2012). Along the southern beaches, access is regularly available. For example, in Ocean Shores, access to the beach is provided every 7/10ths of a mile throughout the municipality's five mile beachfront (Personal comm. M. Plackett 2014).

The 2013 State Comprehensive Outdoor Recreation Plan indicates that current available facility capacity statewide only satisfies 30 to 40 percent of the demand for recreation across the state. During peak periods, anecdotal evidence indicates that certain locations lack the parking facilities to handle the crowds that come to the shore (i.e., parking at the jetty at Westport) (Personal comm. C. Dennehey 2014). While not an issue at this point, the increasing popularity of certain activities can lead to overcrowding. This can be an issue for sports such as surfing or wilderness camping, where space for participation at a given location may be limited.

At various locations along the coast, fees are charged to access the beach; this can be a potential barrier to entry. When the WSPRC proposed charging a beach access fee of $10 per car, the proposal was met with opposition from local tourism businesses. Due to this

opposition, the fee was not enacted (Personal comm. M. Plackett 2014). In other areas, permits are needed to access the beach. For example on the Makah Tribe's lands, a Reservation Use Pass must be purchased for $10 per car to hike to Shi Shi beach or access Cape Flattery. Similarly, access to state parks requires a Discover Pass, which costs $30 per year.

Another issue of concern is the impact of increased rail traffic to the Port of Grays Harbor. This could lead to traffic delays along Highway 12, the sole access to the northern coast (Personal comm. M. Plackett 2014).

CONCERNS ABOUT POTENTIAL MARINE RENEWABLE ENERGY DEVELOPMENT

While there are no current plans for development of marine renewable energy in the study area, the recreational boating industry and the surfing community are concerned about how such development could affect their activities. Charter boat advocates are concerned that offshore wind development could further restrict the areas available for operations (Personal comm. M. Cedergreen 2014). While the U.S. Coast Guard may implement exclusion zones around marine renewable energy equipment, the exact potential restrictions are unclear. For example, "safety" exclusion zones around some oil drilling platforms do not apply to boats under 100 feet (most recreational boats) (Whittaker 2014). Additional detail about the potential restrictions related to marine renewable energy developments is included in the report on that sector.

While not opposed to marine renewable energy development in general, Surfrider Foundation would likely oppose any development that changes the features of the beach or affects wave energy (Personal comm. C. Dennehey 2014).

ENVIRONMENTAL ISSUES

Several environmental issues could potentially impact the recreation and tourism sector, including erosion, poor water quality, and oil spills. Several experts we interviewed mentioned that erosion at certain locations along the southern coast is an issue (Personal comm. M. Plackett and C. Dennehey 2014). Erosion can lead to a loss of facilities or areas available for recreation use, as well as potential water quality issues. A study initiated by Ecology in 1996 found that:

> *Erosion is carving into Southwest Washington beaches. Erosion rates at Cape Shoalwater have averaged over 100 feet per year for a century. In recent decades, new erosion hot spots have developed. Storm waves near the Grays Harbor South Jetty threatened City of Westport facilities and a state park. Another erosion hot spot is at Ocean Shores, north of the Grays Harbor North Jetty. This beach had been growing since the jetty was built in the 1900's, but has recently begun to erode, threatening development. Erosion is also cutting into Cape Disappointment State Park (formerly Fort Canby); up to 90 camp sites could be lost to erosion by the year 2009, scientists with the Southwest Washington Coastal Erosion Study predict*. (Ecology 2014c)

Similarly, the Quileute Tribe is concerned that sediment load could affect access to its marina at the mouth of the Quillayute River. Because the USCG station is located there, dredging has occurred in the past to keep the port open (Personal comm. Quileute Tribe 2014). In general, sediment loading from upstream areas has the potential to affect boat access to and from the ocean area.

Several sources indicate that there are occasional water quality issues that lead to beach or shellfish closures and/or health issues with recreational users of the ocean resources. For example, as noted in a 2009 report, since 1991 the razor clam fishery has frequently closed due to harmful algal blooms (Dyson 2010). A marine algae bloom occurred in the fall of 2009 which caused numerous bird deaths and reports of health symptoms among surfers on coastal beaches (Ecology 2014b, Surfrider Foundation 2014). The Quileute Tribe provides information on the safety of shellfish consumption, based on samples from the beaches monitored by the Quileute Tribe and tested by Washington Department of Health, by posting notices at beaches, and on its website; other local Tribes and DOH also post warnings when shellfish are unsafe for human consumption (Personal comm. Quileute Tribe 2014).

The Washington State Department of Ecology (Ecology) implemented a statewide monitoring and notification program for marine recreational beaches in 2004. The Washington BEACH (Beach Environmental Assessment Communication & Health) program monitors marine beaches for fecal bacteria from Memorial Day to Labor Day (Ecology 2014a). Currently, several beaches are reported as open, but bathing after swimming is recommended because harmful bacteria may be present. These locations include Hobuck Beach, Westhaven State Park, and Westport (the Groynes).

Another issue raised by local stakeholders is concern that oil spills may present a threat to coastal recreational resources. This is an issue for Grays Harbor, where an increase in shipments of crude oil by rail may heighten the risk of spills (Personal comm. M. Plackett 2014).

Finally, tsunamis and sea level rise have the potential to affect recreation activity and facilities in the future. In particular, the Quileute raised concerns that facilities close to the shore could be subject to damage or destruction if there were a tsunami. The Tribe recognizes these dangers and is considering how to deal with this issue in the future (Personal comm. Quileute Tribe 2014).

ENDANGERED SPECIES ISSUES

Local stakeholders also raised concerns that efforts to protect threatened or endangered species could lead to restrictions on recreational use of marine resources in the study area. In particular, there may be conflicts with respect to protections in place to protect western snowy plovers.

When western snowy plovers are nesting on the beach during their breeding season (March to September), areas with nests may be fenced off, decreasing the amount of beach area available for recreation use. Other restrictions may include limiting driving on

the beach. For example, Willapa NWR and Washington State Parks have restricted beach access at Leadbetter Point through the use of 1) complete motorized vehicle driving closures, except during razor clam seasons; 2) signs that are seasonally placed along the upper portion of the beach demarcating nesting areas closed to public entry; 3) symbolic fencing placed seasonally along beach access trails on refuge lands to direct people toward the wet sand and away from plover nesting habitat; and 4) restrictions prohibiting dogs on refuge lands. Prohibitions also include restricting removal of native plants, driftwood, and alteration of other habitat features; fireworks; and certain recreational activities such as kite flying (Industrial Economics 2012).

One recreation expert did not believe that these restrictions have affected the number of people visiting the coast, and feels as though the knowledge that the species are present may actually increase tourism (Personal comm. M. Plackett 2014). As noted on the Long Beach website, "[t]he beach closures protect the nesting grounds of migratory birds as well as give families a place to play on the beach without concern for vehicle traffic" (Long Beach website 2014).

SECTION 4 | INVENTORY OF AVAILABLE DATA

KEY ECONOMIC QUESTIONS AND DATA GAPS

The economic analysis of the outdoor recreation sector is a challenge. It is a non-standardized sector, for which economic data are rarely collected systematically. The sector generates non-trivial expenditures and provides employment to many people, yet the financial and labor figures are reported as parts of other economic sectors and are often hard to trace. Outdoor recreation activities generate expenditures and employment in manufacturing where equipment and gear are produced, in retail where these goods are sold, in the hospitality sector which provides lodging and dining, and in numerous other industries. Specific employment data for outdoor recreation as an industry does not exist (i.e., through the Bureau of Labor Statistics Quarterly Census of Employment and Wages).

As noted above, there are limited recreation and tourism data for Washington's Pacific coast. In addition, for many of the available sources, data are only available for activity occurring at the state or county level, which will overstate economic impacts resulting from activity within the study area. In other cases, while we may have data on visitation for an area (i.e., state parks), we do not have related expenditure estimates. This is far from the data that, ideally, would be available to estimate economic impacts resulting from ocean-derived recreation and tourism activity (i.e., data on the number of visits to the area of interest, coupled with information on spending associated with such trips).

As noted previously, the Surfrider Foundation and Point 97 have recently launched a survey to document the recreational use of Washington's coast. The survey will collect information on the location and type of public recreation occurring from Ilwaco to Port Angeles and provide estimates of the value of that recreation to the state's economy. This survey will provide new data to answer questions about the level of recreational activity and economic impacts stemming from that activity within the study area (and somewhat beyond, as the survey will cover an area along the Strait of Juan de Fuca).

With respect to the economic data that would be most useful for understanding the importance of recreation and tourism to local and regional areas, there are several important data gaps to note:

- Data illustrating the level of participation in specific activities along the coast are largely unavailable – thus, it is not possible at this time to compare the contribution of different activities to the regional economy.
- The Surfrider survey currently being conducted will not include data on extractive recreational activity, such as fishing. While information is available on the level

of participation in this activity, local spending data for recreational anglers are not readily available.

- Recent expenditure data for visitors to state park or ONP locations in our study area are not available.

Further research may enable us to identify additional data on certain activities within the study area. For example, additional data from Indian Tribes and for whale watching activities within the area are likely to be available, as may be additional information on visitation to Grays Harbor NWR.

SUMMARY OF EXISTING DATA SOURCES

The following exhibit summarizes the key sources of information that are currently available on recreation and tourism in the study area. It also discusses the limitations of each source.

EXHIBIT 4-1. INVENTORY OF KEY DATA SOURCES RELATIVE TO THE RECREATION/TOURISM INDUSTRY

DATA SOURCE TITLE (REFERENCE)	OWNER	DESCRIPTION	CAVEATS AND LIMITATIONS	AVAILABLE FROM:
Banking on Nature: The Economic Benefits to Local Communities of National Wildlife Refuge Visitation (Carver and Caudill 2013)	U.S. Fish and Wildlife Service, Division of Economics	Provides 2011 data for visits, expenditures, and economic impacts for select NWRs, including Willapa Bay NWR. Visitation data are based on the Division of Refuge's Refuge Annual Performance Plan (RAPP). Methods to estimate visitation vary by refuge, but can include fee collection, traffic counters, license registration, and other means. Expenditure data are based on FWS' National Survey of Fishing, Hunting, and Wildlife-Associated Recreation. Combined, the FWS and RAPP reports provide profiles of refuge visitor spending in local communities. The economic impact data are estimated based on IMPLAN input-output modeling.	Because the expenditure data are not based on a survey specific to Willapa Bay NWR visitors, results may not be representative.	http://www.fws.gov/refuges/about/refugereports/pdfs/BankingOnNature2013.pdf
Washington State County Travel Impacts & Visitor Volume: 1991-2012 (Dean Runyan Associates 2013)	Washington State Destination Marketing Organizations	For counties in Washington State, provides data on travel impacts and visitor volume. Data for 1991 through 2012 for annual direct travel spending, annual visitor volume, annual industry earnings generated by travel spending, annual employment generated by travel spending, annual tax receipts (local, state). Also provides data on average expenditures for overnight visitors (2012) and overnight visitor volume (2010-2012). Employment estimates represent the total number of full- and part-time jobs directly generated by travel spending. Both payroll and self-employment are included.	For overnight trips, the sum of county-level data exceeds the statewide sum because visitors may visit more than one destination in the same trip. Estimates of daily spending and day trips are not reported at the county level due to data limitations and the pass-through nature of day travel.	http://www.seattlesouthside.com/system/assets/general/static_pages/Dean_Runyan_Washington_Counties_Report_2012.pdf
Washington State Parks: Location Assessment and Financial Analysis for Yurt and Cabin Development (Dean Runyan Associates 2005)	Washington State Parks and Recreation Commission	Provides data on Washington State Park campsites by State Park as of 2003. Also provides demographic information on campers at Washington State Parks. The demographic characteristics of campers and camping parties are based on the Washington State Parks and Recreation Commission 1999 Convenience Camping Survey, data from the Washington State Parks' reservation system, and the results of statewide telephone surveys.	These data may not represent current visitation to state parks in our study area, as visitation patterns may have changed since 2003.	http://www.deanrunyan.com/doc_library/WAStParkImpFinal.pdf

DATA SOURCE TITLE (REFERENCE)	OWNER	DESCRIPTION	CAVEATS AND LIMITATIONS	AVAILABLE FROM:
Economic Impacts of Visitors to Washington State Parks (Dean Runyan Associates 2002)	Washington State Parks and Recreation Commission	The study provides 2000 visitation data for individual state parks in Washington. This study also estimates county-level economic impacts for Washington state parks, including trip spending, associated industry earnings, employment, and tax receipts.	The analysis applied survey data from surveys of recreation areas other than state parks and statewide recreation surveys (i.e. FWS 1996) to estimate expenditure patterns; these data may under- or overstate state park visitors' expenditures. The data may be outdated if visitation and expenditure patterns have changed since 2000.	Christine Parsons Washington State Parks & Recreation Commission Policy and Performance System Manager Christine.Parsons@parks.wa.gov (360) 902-8616
Regional economic impacts of razor clam beach closures due to harmful algal blooms (HABs) on the Pacific coast of Washington (Dyson and Huppert 2010)	*Harmful Algae*	Provides clamming trip data for four razor clamming beaches along Washington's coast. Data include annual participants, average expenditures per party trip, average expenditures per clammer day, and associated economic impacts (sales, employment, labor income). Visitation and expenditure estimates are based on a one-time survey of recreational clammers during April 2008. Economic impact estimates are based on a simple input-output model created for the area of Pacific Harbor and Grays Harbor counties.	Survey respondents were self-selected and were not drawn from a random sample; thus, results may not be representative of the population of recreational clammers.	*Harmful Algae*. Vol. 9(3): 264-271.
Washington Recreational Boats: Economic Impact Research (Hebert and Skotdal 2011)	Hebert Research, Inc.	Provides 2010 data for number of registered recreational boats in Washington State, recreational boat sales, and recreational boater spending (initial costs, annual ownership costs, operating costs). Also estimates the economic impacts of recreational boating in Washington, including output, value added, employment, labor income, and tax revenues. Recreational boater spending estimates are based in part on survey data and industry expert estimates.	Spending estimates are only for owners of Washington recreational boats with market values of $300,000 or more; these owners are likely not representative of smaller sportfishing boats used in our study area. Data reported at the state level may not be representative of our study area.	http://tacomawaterfront.org/site/wp-content/uploads/2014/03/NMTAReportv8.pdf

DATA SOURCE TITLE (REFERENCE)	OWNER	DESCRIPTION	CAVEATS AND LIMITATIONS	AVAILABLE FROM:
The role of recreational charter boat operations in coastal communities: an economic and social analysis in Oregon and Washington (Leonard and Watson 2014)	NOAA Fisheries	Provides 2006 data on Washington State's charter boat industry, including industry costs, revenues, output, income, employment, and associated tax revenues. Cost and revenue data are based on a 2006 survey of Washington marine charter businesses. Survey was distributed to all active Washington State charter vessel license holders and received a 33 percent response rate. The economic impact estimates are based on input-output modeling of the cost and revenue data.	Study does not provide information specific to our study area. In addition, these data may be outdated if economic conditions in the industry have changed since 2006.	Fishery Resource Analysis and Monitoring Division, Northwest Fisheries Science Center, NOAA Fisheries
2012 Recreational Boating Economic Study (National Marine Manufacturers Association 2013)	National Marine Manufacturers Association	Provides 2012 data for recreational boating in Washington State, including the number of recreational boats, the number of associated businesses, total jobs, annual spending, and annual economic impact. Provides data at the state level and for select Congressional districts. The number of recreational boats is based on state boat registration data.	The report does not include a methodology section, so the data sources and analytic methods for estimating businesses, jobs, spending, and economic impacts are unknown. Data at the state and Congressional district level overstate impacts in our smaller study area.	http://www.nmma.org/assets/cabinets/Cabinet432/NMMA_ecoimpact_booklet_optimized.pdf
Ocean Economy Market Data (NOEP 2014)	National Ocean Economics Program	Provides data for the recreation and tourism sector for the ocean economy in Washington State. Annual data at the county- and state-level for the period 1990 to 2011. Data include establishments, employment, wages, and GDP. The ocean economy data are based on NOEP analysis of data from the Bureau of Labor Statistics and the Bureau of Economic Activities. NOEP prepares this data in cooperation with the Economics: National Ocean Watch program of NOAA's Coastal Services Center (CSC). NOEP prepared data for the period of 1990 to 2004, while CSC prepared data for 2005 onward.	County-level data overstate the impacts in our smaller study area. Due to changes in data compilation and analysis methods, the 1990 to 2004 data are not directly comparable to the 2005 onward data.	http://www.oceaneconomics.org/Market/ocean/oceanEcon.asp?ci=N

DATA SOURCE TITLE (REFERENCE)	OWNER	DESCRIPTION	CAVEATS AND LIMITATIONS	AVAILABLE FROM:
Olympic National Park Recreational Visitors by Month (NPS 2014)	National Park Service	Provides monthly visitation data for Olympic National Park, including estimates of visitation to coastal districts within the Park. Visitation estimates are based on traffic counters that capture employee, non-recreational, and recreational vehicles. NPS employs person per vehicle multipliers and other adjustment factors to translate vehicle counts into recreational visit estimates.	Method employed may lead NPS to over- or underestimate visitation. Also, visitors can be double-counted across districts and across sub-district sites if a visitor visits multiple locations.	https://irma.nps.gov/Stats/Reports/Park
Olympic National Park Visitor Study: Summer 2000 (Ormer et al. 2001)	National Park Service	Provides 2000 data on Olympic National Park visitation, including visitor demographics, frequency of visits, length of stays, visitor activities, sites visited, and expenditure information. Expenditure data includes estimates of expenditures in and out of the park, and distribution of expenditures across categories such as lodging, groceries, restaurants, and gas. Report data are based on a visitor survey of Olympic National Park visitors conducted July 7-16, 2000. The survey had 928 responses and a 78.0 percent response rate.	Study does not provide any information specific to our study area. In addition, these data may be outdated if expenditure or visitation patterns have changed since the survey was conducted in 2000.	http://www.nps.gov/olym/parkmgmt/upload/ONPvisitorstudy2000.pdf
The Outdoor Recreation Economy (Outdoor Industry Association 2012)	Outdoor Industry Association	Provides 2012 data on outdoor recreation in Washington State. State-level data include consumer spending, direct employment, wages and salaries, and state and local tax revenue. Data estimates are based on national surveys of outdoor recreation conducted in 2011 and 2012.	Study does not provide any information specific to our study area. Because there is very limited information about the survey methodology, it is unclear how these estimates were calculated. Thus, we cannot determine the factors that are leading these estimates to be substantially higher than estimates from other sources. For example, it is unclear who was surveyed for this study, and exactly what types of activities were included.	http://outdoorindustry.org/images/ore_reports/WA-washington-outdoorrecreationeconomy-oia.pdf

DATA SOURCE TITLE (REFERENCE)	OWNER	DESCRIPTION	CAVEATS AND LIMITATIONS	AVAILABLE FROM:
West Coast Charter Boat Survey Summary Report (Pacific States Marine Fisheries Commission 2004)	Pacific States Marine Fisheries Commission	Provides 2000 data on Washington State charter boat industry. Data include total number of charter boats in fleet, vessel costs, annual expenditures, annual revenue, and annual trips.	Data are based on a telephone survey of charter boat operators in Washington that provided ocean recreational fishing trips during 1997-1998. Vessels that confined their operations to Puget Sound were excluded. Survey selection was based on random sampling.	http://www.psmfc.org/efin/docs/WCCBSR_report2.pdf
Washington State Parks Centennial 2013 Survey (Responsive Management 2006)	Responsive Management	Provides 2006 data on visitor characteristics and patterns for Washington State Parks. Examples of data gathered include percentage of Washington residents who have visited a State Park within the last two years, factors that influence state park choice, and whether the parking fee has impacted the frequency of visits. Data based on a telephone survey.	Analysis of data was in part based on proprietary software developed by Responsive Management; thus, assumptions underlying analytic methods are unknown.	http://www.responsivemanagement.com/download/reports/WA_Parks_Report.pdf
Retail Boat Sales Data (Washington Sea Grant 2014)	Sea Grant	Provides 2007-2013 data on a quarterly basis for boat sales activity in counties in Washington State. Data identifies county of boat purchaser and breaks out new boat sales and used boat sales. Boat sales estimates are based on Washington Department of Licensing data.	Data only identify the number of boats sold and do not identify associated revenues or expenditures.	http://www.wsg.washington.edu/mas/econcommdev/retailsales_data.php
State-Level Economic Contributions of Active Outdoor Recreation - Technical Report on Methods and Findings (Southwick Associates 2007)	Southwick Associates	Provides data for various recreational activities in Washington State. Activities include trail, bicycle, camping, snow sports, paddle sports, fishing, hunting, and wildlife viewing. Data by recreational activity include participation, total expenditures, and economic impacts (sales, salaries and wages, jobs, tax revenues). The participation data covers all of the recreational activities while the expenditures and economic impact data only cover non wildlife-based recreation. The data are based on a 2005 online survey covering bicycle, camp, paddle, snow, and trail-based recreation, and existing data from the 2001 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation by FWS.	These data may be outdated if expenditure or visitation patterns have changed since the survey was conducted in 2005. Also statewide results will overstate impacts for our study area. Survey responses for expenditure data were limited to "qualified respondents" who had participated in recreation and spent money on recreation in the last 12 months; thus, expenditure data may overstate impacts,	http://c.ymcdn.com/sites/www.americancanoe.org/resource/resmgr/spp-documents/researchrecreationeconomysta.pdf

DATA SOURCE TITLE (REFERENCE)	OWNER	DESCRIPTION	CAVEATS AND LIMITATIONS	AVAILABLE FROM:
			since it does not represent recreational participants who did not spend money in the last 12 months.	
Economic Impacts of Visitors to Olympic National Park (Stynes, Propst, and Sun 2001)	National Park Service	Provides 2000 data on visits, expenditures, and economic impacts associated with recreation at Olympic National Park. Provides estimates of visits, party-nights, average spending per party per night, and total spending across lodging types, including local day users, non-local day trips, backcountry campers, and motels outside the park. Economic impact data reported include direct sales, jobs, personal income, and value added. Visitation data are estimated based on data from the NPS Visitor Use Statistics Office. Expenditure data are estimated based on the 2000 Olympic National Park Visitor Survey conducted July 7-16, 2000. Economic impacts are estimated using the NPS Money Generation Model (MGM2).	These data may be outdated if expenditure patterns have changed since the survey was conducted in 2000. Also, results are not specific to locations in our study area; park-wide estimates may not be applicable to our study area.	http://www.friendsonp.org/images/econ_of_olympicnp.pdf
National Park Visitor Spending Effects (Thomas, Huber, and Koontz 2014)	National Park Service	Provides 2012 data on visits, expenditures, economic contributions, and economic impacts associated with recreation at National Park Service units in the U.S. Spending data are reported by visitor segment, including local day trips, non-local day trips, motel outside park, and camp outside park. Economic contributions and impact data reported include jobs, labor income, value added, and output. Visitation data are estimated based on data from the NPS Visitor Use Statistics Office. Visitor spending profiles are estimated for each park unit and each visitor segment based on 56 national park surveys conducted between 2003 and 2012. Economic contributions are estimated by multiplying total visitor spending by park-level economic multipliers. Economic impacts are estimated by multiplying non-local visitor spending by park-level economic multipliers.		http://www.nature.nps.gov/socialscience/docs/NPSVSE2012_final_nrss.pdf

DATA SOURCE TITLE (REFERENCE)	OWNER	DESCRIPTION	CAVEATS AND LIMITATIONS	AVAILABLE FROM:
National Survey of Fishing, Hunting, and Wildlife-Associated Recreation (FWS 2014, 2008, 2003, 1998, 1993)	U.S. Fish and Wildlife Service	Provides state-level data on the number of recreators, how often they participate in recreation, and how much they spend during trips for fishing, hunting, and wildlife-watching. Surveys are conducted every five years, and survey data cover 2011, 2006, 2001, 1996, and 1991. Survey data are gathered via a phased interview process that focuses on samples of likely anglers, hunters, and wildlife watchers. The survey questions and methodology were similar across the 2011, 2006, 2001, 1996, and 1991 surveys. The estimates across these surveys are therefore comparable.	Statewide results may not be representative of our study area. These studies are limited to certain recreation activities and excludes a number of outdoor activities that contribute to the economies of the counties along Washington's Pacific coast. These activities include hiking, camping, and non-motorized water sports (such as surfing, kayaking, or swimming), as well as activities involving motorized equipment, such as boating, motorized water-based sports, recreational vehicle use, and off-road vehicle use.	http://www.census.gov/prod/www/fishing.html
Outdoor Recreation in Washington: The 2013 State Comprehensive Outdoor Plan (RCO 2013)	Washington State Recreation and Conservation Office	Provides data on recreational participation in Washington State. Data include percent of residents participating in activity categories (e.g., water-based recreation), percent of residents participating in recreational activities (e.g., swimming), and mean days of participation in recreational activities (e.g., 17.8 days of beach activities per year). Participation data are based on a large-scale telephone survey of Washington residents designed to assess recreational participation patterns and future needs.	Statewide results may not be representative of our study area. Study only provides participation rates; additional information is needed to estimate recreation trips or number of participant days. Seasonal data reported in the 2013 report are from the 2006 SCORP, in which seasonal data were obtained. This assumes seasonal participation trends in 2013 are similar to those in 2006.	http://www.rco.wa.gov/documents/rec_trends/2013-2018SCORP-FullRpt.pdf

DATA SOURCE TITLE (REFERENCE)	OWNER	DESCRIPTION	CAVEATS AND LIMITATIONS	AVAILABLE FROM:
State Park Data (WSPRC 2015-2014)	Washington State Parks and Recreation Commission	Provides 2004-2013 Washington State Park data on visitation, full-time employees, total revenue, and total park operating expenditures for locations and areas in Washington State. Full-time employee data is based on how the state parks allocate employees across park units. Total Revenues include net camping revenues, Discover pass revenues collected at the specific park, and other revenues. Total park operating expenditures include park expenditures, indirect costs, park operations overhead costs, and region overhead costs.	We note that these visitation estimates are based on traffic counters at state park entrances and an assumed factor of 3.5 persons per vehicle. As such, there is potential that visitors may be double-counted (e.g., if the same cars enter more than once, or are counted at multiple locations). The assumption of 3.5 visitors per vehicle may also over- or under-state visitation.	Christine Parsons Washington State Parks & Recreation Commission Policy and Performance System Manager Christine.Parsons@parks.wa.gov (360) 902-8616

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APPENDIX A

SUMMARY OF EXPERT INTERVIEWS

CONTACT NAME (AFFILIATION)	DATE OF INTERVIEW	CONTACT INFORMATION
Mark Placket (Citizen seat, WCMAC)	April 30, 2014	Ocean Shores, WA Phone: 360-589-6979 E-mail: mplackett@gmail.com
Casey Dennehey (Surfrider Foundation, recreation seat WCMAC)	April 22, 2014	Program Manager Washington Coast Surfrider Foundation Phone: 360-556-6509 E-mail: cdennehy@surfrider.org
Randy Kline (WA State Parks and Recreation, WCMAC)	April 24, 2014	Environmental Program Manager Washington State Parks and Recreation Commission 1111 Israel Road SW Tumwater, WA 98501 PO Box 42650, Olympia, WA 98504 Phone: 360-902-8632 E-mail: randy.kline@parks.wa.gov
Kathy Steichen (National Park Service)	April 29, 2014	Chief of Interpretation, Education & Volunteers Olympic National Park 600 East Park Avenue Port Angeles, WA 98362 Phone: 360-565-3133 Mobile: 360-912-2770 E-mail: kathy_steichen@nps.gov
Andi Day Long Beach Peninsula Visitors Bureau	May 15, 2014	Executive Director Long Beach Peninsula Visitors Bureau PO Box 562 Seaview, WA 98644 Phone: 360-642-2400 E-mail: Andi@funbeach.com Website: www.funbeach.com