

5. Recreational Behaviour



In BC, 68% of the population chose to live in the province because of the access to nature. In 2011, more than \$7.5 billion was spent on nature-based activities (CCRM 2014).

PHOTOS: B. HARVEY



How We Value ‘Place’ and Other Marine Activities

With almost 7,500 km of shoreline, more than 400 islands, diverse landscapes, fish, and wildlife, the Salish Sea is a mecca for those who love to be on, under, or near the ocean. Each day hundreds of thousands of BC and Washington State residents experience the myriad benefits of the Salish Sea’s ‘natural capital’, from the plethora of recreational opportunities accessible practically at the doorstep, to the inherent quality of life that residing in such a geographically stunning region provides. It is the reason we call this place home and the reason so many visit.

In this chapter, we explore personal use of marine environments throughout the Salish Sea. We focus on rates of participation and the geographic distribution of activities as a proxy for the value placed on the sea around us.

Ultimately, we all determine the importance of walking on a clean beach, kayaking in the presence of killer whales, or watching coastal birds. Although willingness-to-pay and opportunity cost appraisals can be used to assign a commercial worth to these activities, neither captures the cultural and inherent value. Therefore, rather than calculate these activities from commercial perspectives, we present information regarding levels of participation and key locations as indicators of abundance, diversity, and distribution (we’re biologists).

In determining the value of outdoor activities within the Salish Sea, we focus on those that are prevalent, involve various demographics, and have a direct link to the marine environment. Specifically, we examine saltwater sport fishing, sea kayaking, bird watching, walking and combing beaches, boating, sailing, and surfing.

Bird Watching

Numerous sanctuaries, parks, and bird watching sites, hosting hundreds of resident and transitory bird species, exist throughout the Salish Sea. We used Important Bird Areas (IBA),¹ marine parks, and other relevant protected areas as proxies for locations where people bird watch, while recognising that the activity could occur in many other locations.²

A 2011 US-wide recreation study found a bird watching participation rate of only 5% (TOF 2013), whereas recreation studies from Washington State estimate that 26% of its residents observed or photographed birds and 10% observed or photographed marine life (CR 2007). Other US surveys, which focussed just on birding, found Washington has a participation rate of 36% or 1.5 million resident birders (USFWS 2009).

In BC, recreational survey results for the Lower Mainland-Coast Mountain region and Vancouver Island indicate very high resident participation in birding at 25% and 32% respectively (Tourism BC 2013). Applying the mean participation rates indicates a Salish Sea birding population of more than 1.8 million with a range of 1.1 million to 2.4 million.³

1 Important Bird Areas are discrete sites recognized internationally, which support specific groups of migratory, threatened, large flocks, or birds with restricted ranges or habitat. See <http://www.ibacanada.ca/>

2 Studies in the US have shown 83% of birders use public land such as parks and wildlife refuges for bird watching (USFWS 2001).

3 For BC, we applied the 25% and 32% rates (BC Tourism 2013) to population statistics for the Mainland and Islands respectively (total 891,383). For Washington, the mean was taken from



Important Bird Areas (see map, Chapter 4) of international importance in the study area include Boundary Bay, Washington State's Olympic Peninsula, Port Angeles harbour, Point-no-Point, Skagit Bay, and the Samish/Padilla Bays.

The BC portion of the study area similarly contains numerous sites of high importance to birds and thus bird watchers, including: the Fraser Delta and Boundary Bay, the Cowichan Estuary and Sidney Channel, Little Qualicum Estuary to Nanoose Bay, K'omoks, Carmanah-Walbran Provincial Park, English Bay, and Burrard Inlet in the heart of Vancouver.

PHOTOS: (INSET, ABOVE) J. THOMPSON; K. SMITH /MAPLE LEAF ADVENTURES



Surveys suggest a Salish Sea birding population between 1.1 million and 2.4 million people. Another method—applying a mean participation rate of 22%^a across the Salish Sea region—finds a comparable 1.8 million residents are interested in birds.

PHOTO: (LEFT) OCEAN RIVER ADVENTURES

a) The average is determined by participation rates quoted in, or relevant to, the study area. Individual rates are not weighted.



Participation rates from Washington and BC suggest over one million Salish Sea^a residents participate in marine powered boating. Notably this figure does not consider participation from BC or Washington residents not living within the study area boundary.

PHOTO: (ABOVE) R. DIXON

a) Applying the 13% participation rate (CR 2007) to the WA study area population (570,222) and the 15% rate (Tourism BC 2013) in BC (505,695) for a combined 1,075,917.

In an average year, more than one million Salish Sea residents get out on the ocean in a motorized vessel.

PHOTOS: (RIGHT) A. ROSENBERGER; (BELOW) K. SMITH/MAPLE LEAF ADVENTURES



Power Boats and Sailing

With sheltered anchorages and spectacular scenery, the Salish Sea ranks among the world’s best sailing and boating locations. Although somewhat more exclusive (due to boating costs), boating participation⁴ is high throughout the Salish Sea.

Studies in Washington show resident participation in saltwater sailing around 7% (CR 2007), a figure much higher than the national average of 1-2% for all freshwater and marine sailing. Boating in general has a participation rate of 15% in Washington with personal boat ownership at 26% (280,000 registered vessels, USCG 2011). Saltwater boating is estimated to have a participation rate of 13% (CR 2007).

Participation is similar in BC with 15% of residents engaging in motorized boating on the ocean (Tourism BC 2013). Lower estimates for boat ownership indicate 610,000 households with boats—one of the highest levels in the country at more than 25% (NMMA 2012).

In BC, 45 marine sailing and yachting clubs have 60,000 members (Gill et al. 2006). In Washington State, there are 256 marinas with 39,400 moorage slips (WDE 2008).

the 5% rate (TOF 2013), 26% rate (CR 2007) and 36% (USFWS 2009) and applied to population statistics for the study area (total 978,150).

⁴ This does not include human powered vessels, e.g. canoes and kayaks.



Saltwater Sport Fishing

Saltwater fishing in the Salish Sea is enjoyed by more than half a million annual participants who target crab, prawns, shrimp, groundfish (such as halibut and lingcod) and of course, salmon. Based on BC fishing license sales, the number of resident saltwater anglers has remained largely constant, increasing only slightly from 234,000 in 1999-2000 to 255,000 in 2011-12 (DFO 2012). Similarly, 285,000 residents in Washington State purchased saltwater fishing licenses⁵ for the 2008-2009 season (WDF&W 2008).

⁵ Includes saltwater, combination, and short-term combination licenses.

Lies, damn lies, and statistics

Recreation surveys use various techniques and definitions that make comparisons difficult. Therefore, rather than relying on single references, Raincoast used multiple estimates of participation in each activity and compare these with supporting studies. We apply the average (mean) and range of participation rates to population statistics in the study area to specify the total population participating in each activity.^a

^a Participation rates are rounded to the nearest whole number. A range of higher and lower estimates is provided where appropriate.



Figure 5.1
Marinas and boat launches in the Salish Sea



Based on license sales, there are approximately 540,000 resident saltwater anglers in Washington and BC. Based on mean participation rates (applied to population statistics for districts within the study area), more than 865,000 Salish Sea residents actively participate in saltwater fishing. ^a The range is between 580,000 and 1.1 million saltwater anglers in the Salish Sea. ^b

PHOTO: FISHINGWITHROD.COM

a) The 12% rate (Tourism BC 2012) was applied for BC for a total population of 404,556. For Washington a mean of 10.5 was calculated considering the 4% rate (TOF 2013) and 17% rate (RBFA 2013) for a population of 460,564.

b) No range applies to BC as only the 12% rate (Tourism BC 2012 is applied) for a total population of 404,556. In Washington the lower bound estimate, using the 4% rate (TOF 2013), is 175,453 and the higher bound estimate, using the 17% rate (RBFA 2013), is 745,675.

The percentage of Washington residents who fish in saltwater from a bank, dock, or jetty (7%) and those who fish from a private boat (10%) suggests that access to a boat does not hinder participation (CR 2007). National US recreation surveys put saltwater fishing participation at only 4% (TOF 2013), whereas surveys that focused more directly on fishing show almost 17% participation in Washington State (RBFA 2013). Peak saltwater fishing in Washington occurs in July with roughly 436,000 participants fishing from a bank, dock, or jetty, and 638,000 individuals fishing from boats (CR 2007).

US-wide industry surveys show participation figures that compare well with license sales (ASFA 2008) and suggest 286,000 people annually participate in saltwater sport fishing in Washington with more than 1,555,000 saltwater fishing days. In the US, the average number of days spent saltwater fishing was roughly 17 (RFBA 2013), versus 13 days in Canada (DFO 2012).

In BC, a provincial survey indicated 12% of residents had been saltwater fishing at least once between December 2008 and November 2009 (Tourism BC 2013). A national survey found the number of active BC saltwater anglers at 146,000 in 2000, 170,000 in 2005, and 167,000 in 2010 (DFO 2012). These survey figures imply a lower participation rate than fishing license sales indicate.

Sea Kayaking

Sheltered waters, campsites, islands, stunning landscapes, and a range of marine wildlife make the Salish Sea an ideal location for sea kayaking. Popular kayaking areas include the Gulf Islands, Discovery Islands, and Desolation Sound on the east coast of Vancouver Island. In Washington State, the San Juan Islands are one of the most popular regions, but sea kayaking extends throughout Puget Sound and the Strait of Juan de Fuca.

Surveys by the State of Washington show that 4.5% of the population kayak or canoe in saltwater (CR 2007), which is



A participation range of 1–4.5% suggests a resident population of marine kayakers in the Salish Sea between 77,500 and 349,000. The average participation rate of 2.7% would suggest more than 209,000 resident kayakers in the Salish Sea.^a

PHOTO: OCEAN RIVER SPORTS

a) Figures assume that BC participation rates mirrors Washington State and the US.

A Club for All Paddlers

The Salish Sea provides recreational opportunities for thousands of enthusiastic paddlers. The region hosts at least 27 sea kayaking clubs representing diverse areas, interests, businesses, and cultures.

Dragon boat racing, not captured in our surveys, is another growing activity for paddle enthusiasts on the Salish Sea.

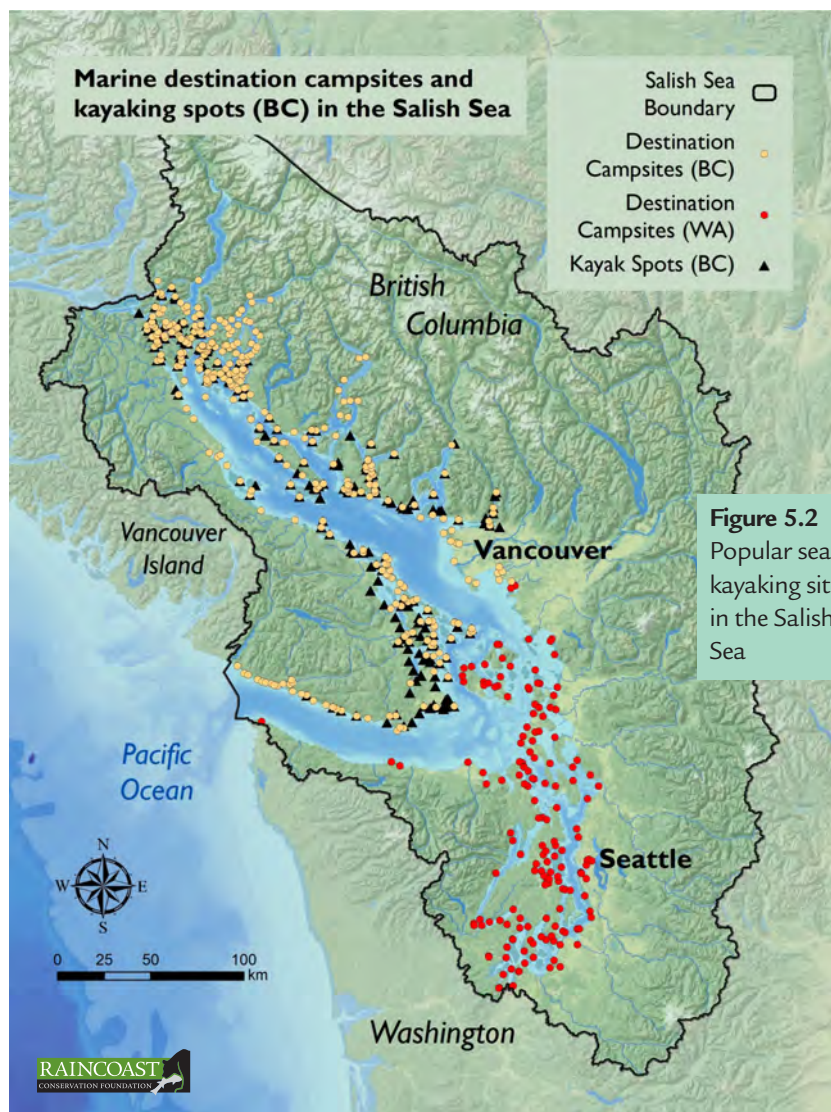


Figure 5.2
Popular sea kayaking sites in the Salish Sea

much higher than the national average of less than 1% (TOF 2013). In BC, estimates suggest sea kayaking is far more popular now than 30 years ago, showing a 20% growth rate since 1995 in resident participation (Gill et al. 2006).





The mean participation rate ^a indicates 3.3 million residents use beaches in Salish Sea ^b with a range between 2.9 and 3.8 million people ^c.

PHOTO: A. ROSENBERGER

a) For Washington the mean is calculated from the 34%, 29%, 37%, and 49% participation rates referenced. The 37% mean indicates a beachcombing population of 1,622,940. In BC, the figures of 60% (Vancouver Island 416,212) and 48% (Mainland 1,285,256) are applied.

b) This range excludes all other residents within BC and Washington, and should be considered conservative.

c) No range applies for BC. In Washington the range represents the 29% rate (1,272,034) and 49% rate (2,149,300) applied across all study area populations.

A local surfer catches a nice right-hander at Jordan River, BC. This and nearby areas can host 300+ surfers on a day with good conditions.

PHOTO: C. DARIMONT

The Beachcombers

A stroll down the beach, or simply time on the beach, is one of the most common pursuits in the Pacific Northwest. On Vancouver Island, 60% of surveyed residents indicated their participation in “ocean beach activities”. This was higher than the 48% of residents from the Lower Mainland-Coast Mountain region who engage in these activities (Tourism BC 2013). Similarly, although 34% of all Washington residents enjoyed beachcombing in the summer, the coastal residents were more active. Average participation in coastal Washington was 49% (Islands) 37% (Coast) and 29% on the Peninsula (CR 2007).

Surfing

Surfers have a direct physical connection to the marine environment. They bond with the activity itself and with specific surf locations; the latter based on the frequency and nature of waves, social, and other environmental factors (Lazarow et al. 2008).

Data on participation rates are sparse for the Salish Sea region, but available studies suggest a resident surfer population



The Surfrider Foundation^a has 8 local chapters within the study area: 6 in Washington, 1 in Victoria, and 1 in Vancouver, with a total of 576 members (C. Snyder, 2013 pers. comm., May 10). Although these numbers are low in comparison with other types of recreation, surfers are high frequency participants, typically surfing over 100 times per year (Wanger et al. 2011).

a) An international group whose mission is the protection and enjoyment of oceans, waves, and beaches through a powerful activist network. See: <http://www.surfrider.org>

of less than 1%⁶ (Leeworthy and Wiley 2001, CR 2007, TOF 2013). This translates into more than 59,000 resident surfers around the Salish Sea with experts suggesting a possible 90-120,000 surfers in Washington (C. Nelson, 2013 pers. Comm., May 10).

Revealing actual surf locations is somewhat taboo in surf culture. However, we used a popular surf website, *Wannasurf*, and augmented their sites with input from local Surfrider chapters. Accordingly, we found that the north and south coast of the Strait of Juan de Fuca provide the most consistent waves with more than 40 locations on the southern coast (Figure 5.3 below).

⁶ The mean of 0.77% is calculated from Rates 0.01% (Leeworthy and Wiley 2001), 1.3% (RC 2007), and 1% (TOF 2013) 2013 59,733.



Figure 5.3: Popular surfing spots and beach access within the Salish Sea.