# KAYAK POINT REGIONAL PARK Day Use Area Improvements

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# Sea Level Rise

- Relative sea level rise projections based on National Research Council regional SLR projections for the Pacific Coast
- Based on Intergovernmental Panel on Climate Change (IPCC) projections.



Table 3. Present and projected tidal datums for Kayak Point.

Datum	Elevation (FT NAVD88)	Elevation (FT MLLW)
MLLW (2017)	-2.2	0.0
MHHW (2017)	9.04	11.24
High water (2017)	12.19	14.39
MLLW (2100)	2.49	0.0
MHHW (2100)	13.73	11.24
High water (2100)	16.88	14.39

**Figure 1.** Conceptualized model of current conditions and future (approximately the year 2100) conditions due to projected sea level rise of 4.69 ft, with elevation in FT NAVD on right, and existing beach profile.



High water 21

MHHW 2

High water 201

MHHM

16 15

13 12

# Elevations for Park Land Uses

Structure/Amenity	Existing FFE	Future FFE (for 2100)	
Concession Building and Pier	+15.9' NAVD88	+15.9' – Confirm lifespan of	
		pier. If short, discuss potential	
		renovation. If long, consider	
		raising.	
Northern/Small Picnic Shelters	+11.6' to +12.4' NAVD88	+15 min. – Consider shifting	
		northern shelter locations to	
		respond to public request for	
		parking near some shelters,	
		address higher deposition rate	
		at northern end of beach and	
De et la vera la coma de consida		possibly provide more shelters	
Boat Launch approach grade	+12 to +13 NAVD88	+16 to $+17 - 0$ nigner? with	
		the pile supported approach,	
		having the launch nigher will	
		at least for the short(ish) term	
Northorn Portroom	+12 2' NAVD99	Accumentation the short (ISI) term.	
Northern Restroom	+ 13.2 NAVD00	Assume this building will be	
New Central Postroom			
South Picnic Shelter/Restroom	+12.0' NAVD88	$\pm 17$ \pm	
South Fichic Sheller hestroom	12.0 NAVD00	replacement would be built	
		higher	
New Play Area	+13.5' NA\/D88	$\pm 16 - Possibly bigher if needed$	
New Hay Area	10.0 14/1200	for drainage	
Parking Lots	+14 NA\/D88	$+16 \text{ to } +165^{\circ} \text{ typ } - \text{Possibly}$	
		higher if needed for drainage	
		away from payement?	
Landscape Areas	+12 to +15 NAVD88	+14  min to $+17  typ$ – Minimize	
		low areas/areas of water	
		concentration.	
Bio-swales	N/A	+12 min.	

Building & Site Existing & Proposed Finished Floor Elevations (FFE)



# Lagoon Redesign Concept



**Figure 15.** US Coast and Geodetic Survey historic T-sheet from 1886 showing the historic configuration of the south Kayak Point shore, including backshore lagoon with northward draining tide channel.

**Figure 16.** Digitized position of lagoon and marsh adapted from Collins and Sheikh (2005) displayed on 2003 photo. *Photo courtesy of Snohomish County*.



### Schematic Plan



DAY USE AREA | SCHEMATIC PLAN **KAYAK POINT COUNTY PARK** 

j.a. brennan associates, PLLC in association with Reid Middleton, Rolluda Architects, Raedeke, Shannon & Wilson, Coastal Geologic Services, SWCA, and Stantec





Kayak Point Regional Park | Snohomish County Parks and Recreation

2/1/2017

associates PLLC

DATUM NOTES: 1. VERTICAL DATUM: NAVD 88 2. MLLW: -2.2' 3. MHHW: +9.04'







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**Boat Launch Sections** 

#### King Tide With and without a backshore berm (A Bellingham example)





### MUKILTEO WATERFRONT Master Plan & Promenade









PREFERRED ALTERNATIVE MUKILTEO DOWNTOWN WATERFRONT MASTER PLAN CITY OF MUKILTEO Si.a. brennan

Scale 1" - 67









