

From: [Charles Schmid](#)
To: [David Ward](#); [Debbi Lester](#); [Anne Blair](#); [Kirsten Hytopoulos](#); [Bob Scales](#); [Steve Bonkowski](#); [Sarah Blossom](#)
Cc: [Ryan Ericson](#); [PCD](#); [CityClerk](#)
Subject: Re: Sea Level Rise
Date: Monday, May 06, 2013 11:41:35 AM

To: Members of City Council
cc: City Clerk and Planning Dept. Staff
From: Charles Schmid
Date: May 6, 2012

Reference: My Memo to City Council "Missing Deliberations for Point Monroe"
January 15, 2013

Dear Members of the City Council,

I realize you have a lot to read regarding the B.I. DRAFT SMP, and probably won't get to reading an interesting chapter in the referenced book below on *Impacts of Climate Change*.

For those who have time to read only a short section of that chapter, I have copied one section (4.1.2) below as it pertains to sea level rise (SLR) for Bainbridge Island. But the time to consider inserting new text on SLR policy into the SMP as recommended in my January 15, 2013 memo has gone by.

The DRAFT SMP needs to be forwarded to Ecology now. Hence my memo is for education, for the record, and to serve as a reminder for readers to look into how we can prepare for SLR as other cities are now doing. I look forward to working in the future on this subject after the SMP is approved and we all get a deserved recess.

Sincerely,
Charles Schmid
10677 Manitou Park Blvd.
Bainbridge Island, WA 98110

<http://ces.washington.edu/db/pdf/wacciach8coasts651.pdf>

Huppert, D.D., A. Moore, and K. Dyson. 2009. **Impacts of climate change on the coasts of Washington State**. Chapter 8 in *The Washington Climate Change Impacts Assessment: Evaluating Washington's Future in a Changing Climate*, Climate Impacts Group, University of Washington, Seattle, Washington.

4.1.2. Expected Impacts on Washington Beaches

4.1.2a. Bainbridge Island

Bainbridge Island contains 85.2 km (53.3 mi.) of shoreline with 82% of the shorelines currently in residential, recreational, commercial, or industrial use. Bainbridge Island's shorelines are quite diverse, with conditions ranging from polluted urban waterfronts, to residential developments, to fairly uninhabited areas of shoreline with intact riparian habitats (NOAA, 2004). The majority of development is for single-family residences, but also includes parks, a fish-pen aquaculture center, a ferry terminal, and mixed-use developments. About 48% of the shoreline is armored (mostly vertical rip rap or concrete structures). Figure 2 illustrates a bulkhead protecting homes along Bainbridge Island's shoreline. About 27% of the shoreline has armoring that extends into the intertidal zone (NOAA, 2004). Where shoreline modification is extensive, the slope is gauged as unstable, while the areas with little shoreline modification have stable slopes. Areas most susceptible to inundation are the uplifted beach terraces on the southern third of the island, and the majority of the bays and coves on the island (City of Bainbridge Island, 2007). Rolling Bay-Point Monroe on the northeastern shore runs 9.0 km (5.6 miles) encompassing Point Monroe, Point Monroe Lagoon, and Rolling Bay to Skiff Point. Areas like Point Monroe (Figure 3), where houses are situated on a small strip of beach with water on two sides, are especially at risk. While Point Monroe is primarily residential, its shore does include Fay Bainbridge State Park, which is a stretch of relatively undeveloped sandy beach with access for recreation. Many homes along the spit at Point Monroe are built on fill material (NOAA, 2004). A total of 291 modifications were recorded along the Point Monroe shorelines, at an average of 10 modifications per 1000 ft. (NOAA, 2004). These include protective structures at the waterline (112), docks (33), and overwater structures (28). NOAA (2004) recommends that unnecessary armoring structures, especially those that intrude into the intertidal zone, be modified or removed.