

## Merrill, Hannah

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**From:** Merrill, Hannah  
**Sent:** Thursday, May 24, 2012 2:47 PM  
**To:** zSMP  
**Subject:** FW: SMP references to sea level rise

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**From:** Soule, Ann  
**Sent:** Tuesday, May 15, 2012 3:01 PM  
**To:** Gray, Steve  
**Cc:** Brastad, Andy  
**Subject:** SMP references to sea level rise

Steve,

As a geologist and hydrogeologist with an extra-long-term perspective, and having worked on water quality projects related to potential septic system contamination in lower Dungeness, I am concerned that the SMP address potential impacts from increased storm surge erosion and related effects of sea level rise and climate change. I know these concerns are more abstract than urgent, but as the SMP introduction letter from DCD says:

The Preliminary Draft SMP is designed to improve understanding and awareness of shoreline threats and of the value of protecting shoreline environments, but additional outreach programs are needed to provide property owners with the assistance they need to confront the issues that are part of life when you live on the shoreline.

When specific regulations aren't possible, I suggest broader policies that acknowledge the increasing need over time for enhanced property protection (including septic systems) due to rising sea level and adjacent groundwater table, increased storm/tide erosion of coastlines, and increased frequency of "100-yr" flood events along marine shorelines. The SMP update should be a solid reference for guiding future County programs and potential regulations at the point they are needed.

In thinking about this, I figured that Ecology would have guidance and found the following resource (no date but no more than 2 years old—I don't know what it's an appendix for):

## Appendix A: Addressing Sea Level Rise in Shoreline Master Programs

[http://www.ecy.wa.gov/programs/sea/shorelines/smp/handbook/sea\\_level\\_guidance.pdf](http://www.ecy.wa.gov/programs/sea/shorelines/smp/handbook/sea_level_guidance.pdf)

Please ensure that potential issues related to sea level rise are fully integrated into the SMP. Thank you.  
Ann

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PS –

The primary reference on the topic seems to be from UW Climate Impacts Group (first link), but it isn't as current as the second link here:

**Sea Level Rise in the Coastal Waters of Washington State**, Mote et. al. (January 2008)

<http://cses.washington.edu/db/pdf/moteetalslr579.pdf>

**Modeling Sea Level Rise Impacts on Storm Surges Along the Pacific Northwest Coast**, Dr. Claudia Tebaldi, Climate Central (March 2012)

<http://iopscience.iop.org/1748-9326/7/1/014032/article>

Also very relevant: Washington's Integrated Climate Change Response Strategy:

[http://www.ecy.wa.gov/climatechange/ipa\\_responsestrategy.htm](http://www.ecy.wa.gov/climatechange/ipa_responsestrategy.htm) (April 2012)

Finally, here is an excerpt from a related Ecology focus sheet that may be helpful:

## **Focus on: Preparing for Impacts**

(by Ecology and CTED)

CLIMATE CHANGE  
PREPARATION AND ADAPTATION  
WORKING GROUPS:

Coastal & Infrastructure Working Group

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Incorporate climate change and its impacts into planning and decision-making processes.

- Revise state land use, shoreline, and flood control planning statutes and regulations, and clarify the State Environmental Policy Act (SEPA) to effectively address sea level rise and other climate change impacts.
- Incorporate climate change considerations into emergency planning.
- Incorporate best available sea level rise and other climate change data and information into state and local government planning to promote resiliency of ecological systems and communities.
- Incorporate future sea level rise concerns and other climate change impacts in prioritization for funding, design, and post-project operation and maintenance.

Educate, inform and engage landowners, public officials, citizens and others.

- Inform property purchasers and investors regarding risk of sea level rise that may affect coastal property.

<http://www.ecy.wa.gov/pubs/0801003.pdf>