

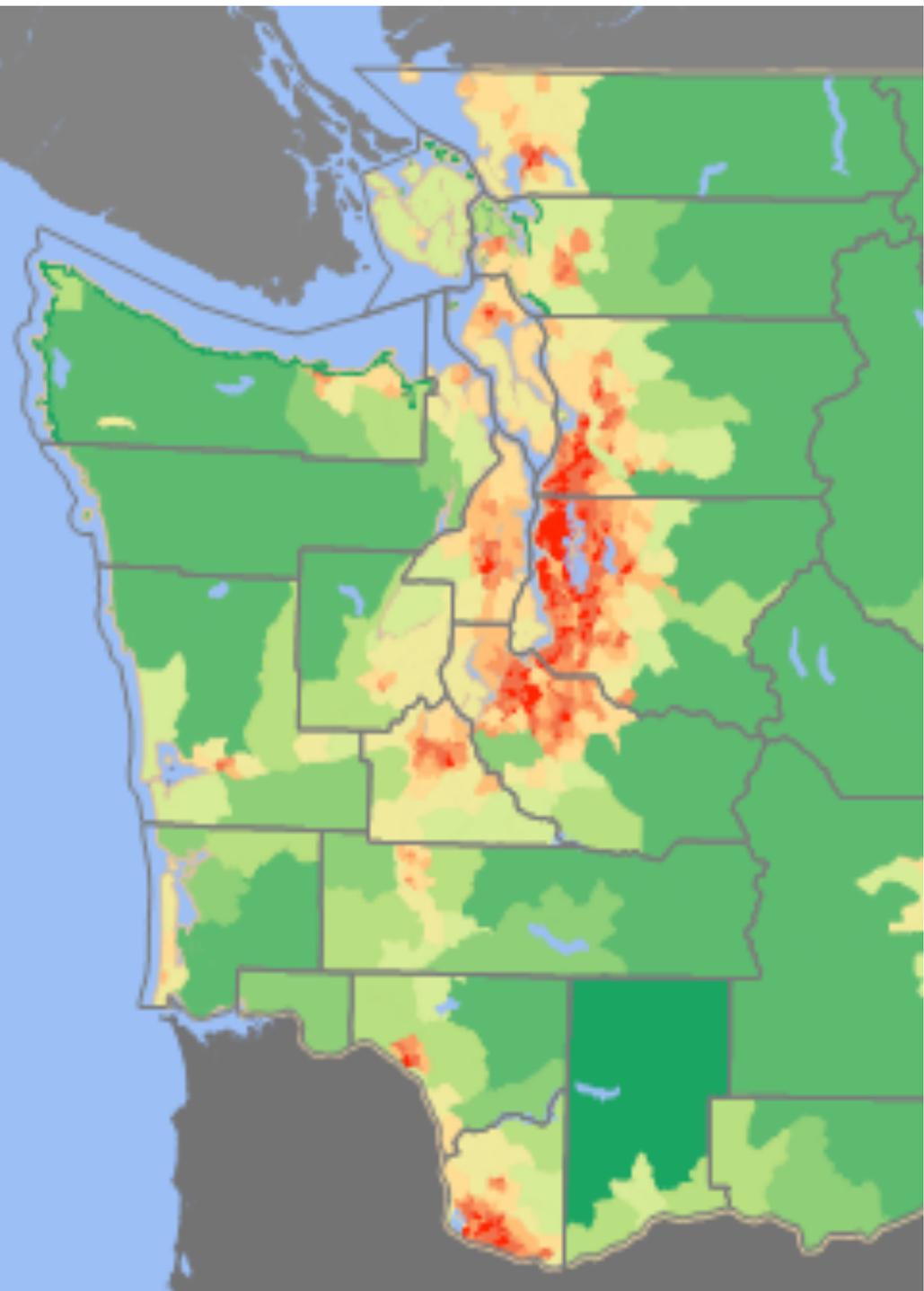
# Successful Adaptation to Climate Change in the Coastal Context of Washington State

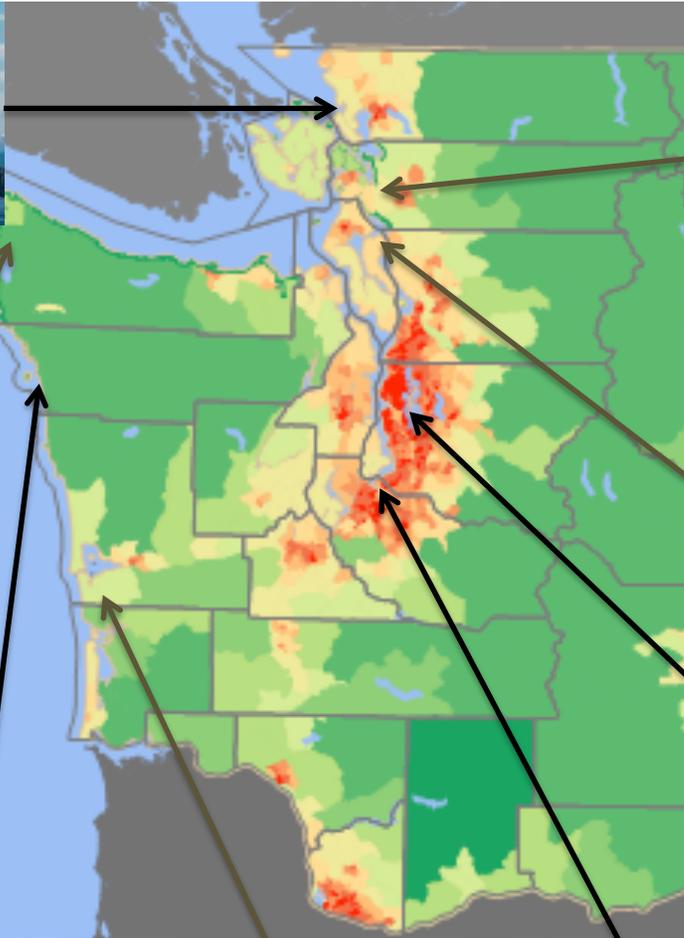
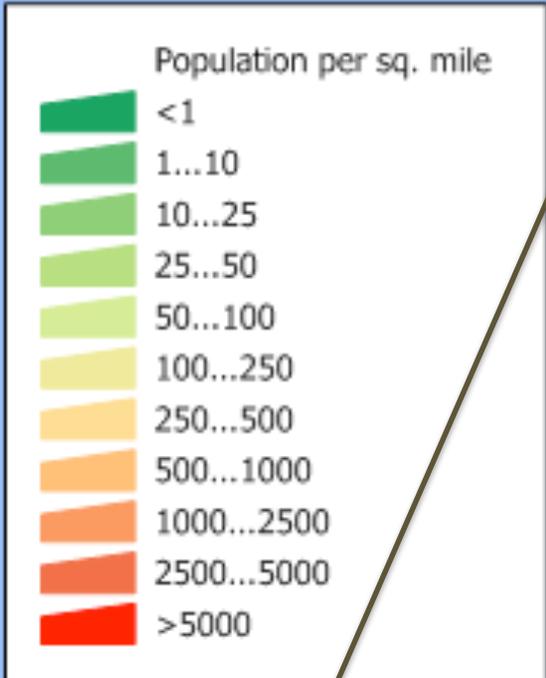
**Amy Snover, PhD**  
Director, Climate Impacts Group  
University of Washington

National Adaptation Forum  
4 April 2013



*Climate Science in the  
Public Interest*

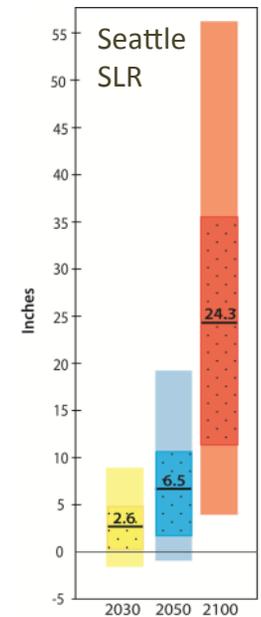
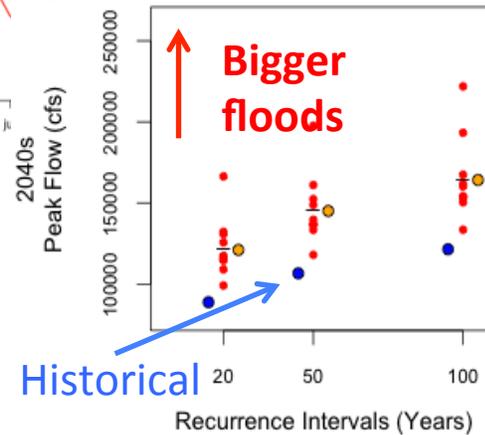
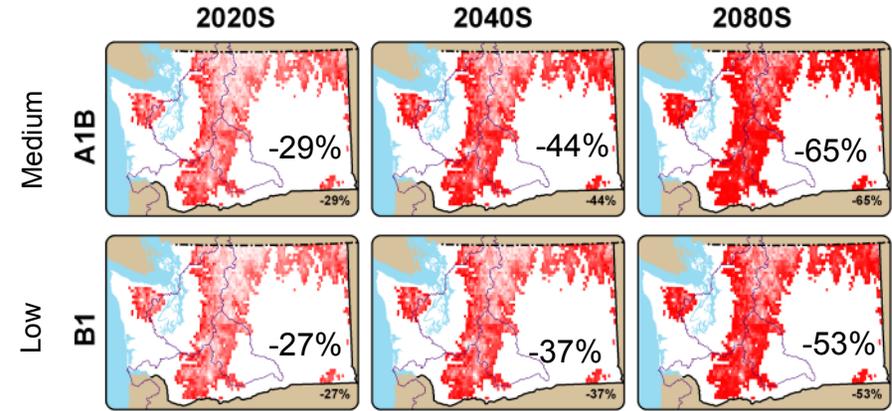
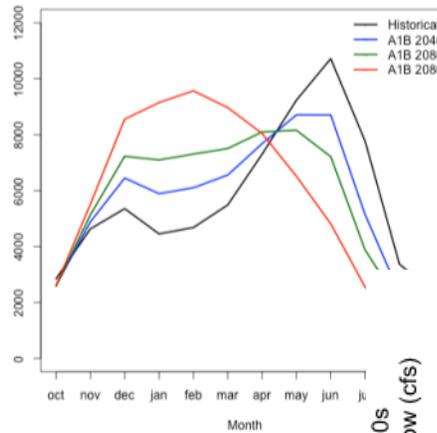
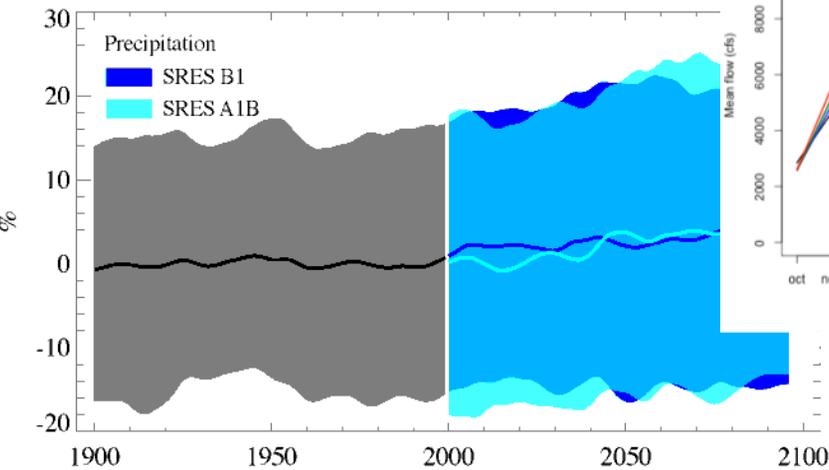
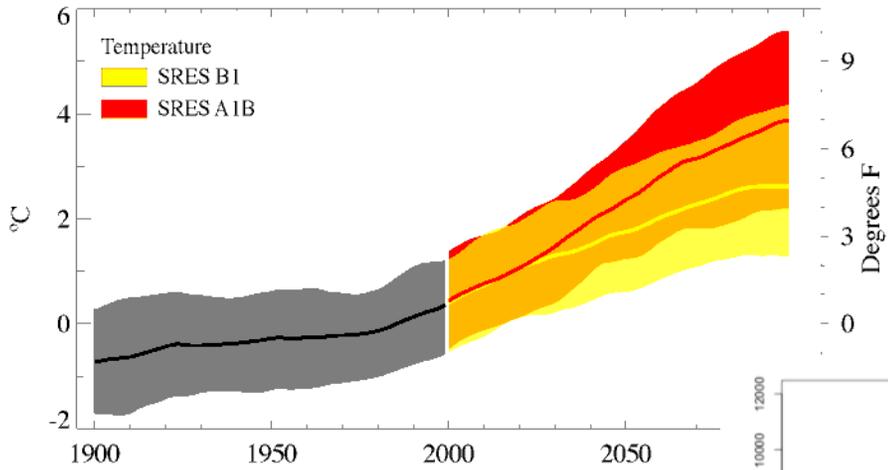
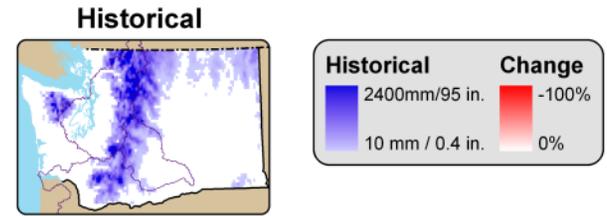






# Coastal climate impacts in WA

Key Impact: Loss of April 1 Snow Cover



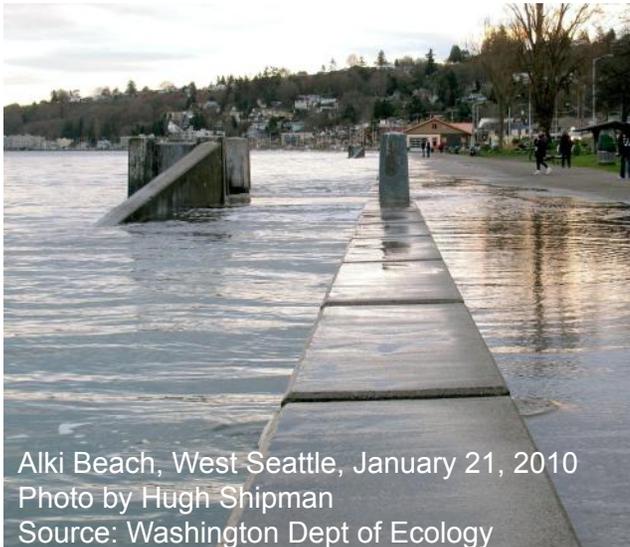
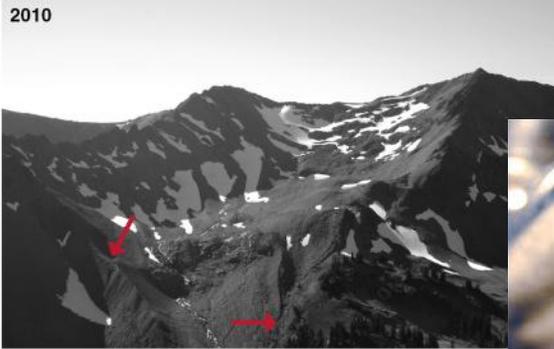
SLR figure based on NRC 2012



# Coastal climate impacts in WA



Olympic National Park - Lillian Glacier



Alki Beach, West Seattle, January 21, 2010  
Photo by Hugh Shipman  
Source: Washington Dept of Ecology





## WA: Adaptation Responses at all Levels

**Federal:** USFS/NPS, DOI – NPLCC (Science & TEK); NMFS

**Tribal:** Swinomish, Quileute, Jamestown S’Klallam

**WA State:** 2012 overarching state response strategy plus activities across agencies (Ecology, WSDOT, DNR, DFW, Insurance Commissioner survey, Emergency Management); commitment from Governor

**Local:** Lots in Puget Sound, little elsewhere

**NGOs:** Most energy in conservation-related efforts (NWF, TNC, Ducks Unlimited, EcoAdapt)



# Workshop Participants

Federal (3), state (7), tribal (2), county (4), local (3), NGO (1)





# Case 1: Using Sea Level Rise as a driver to reduce flood risk (Olympia)

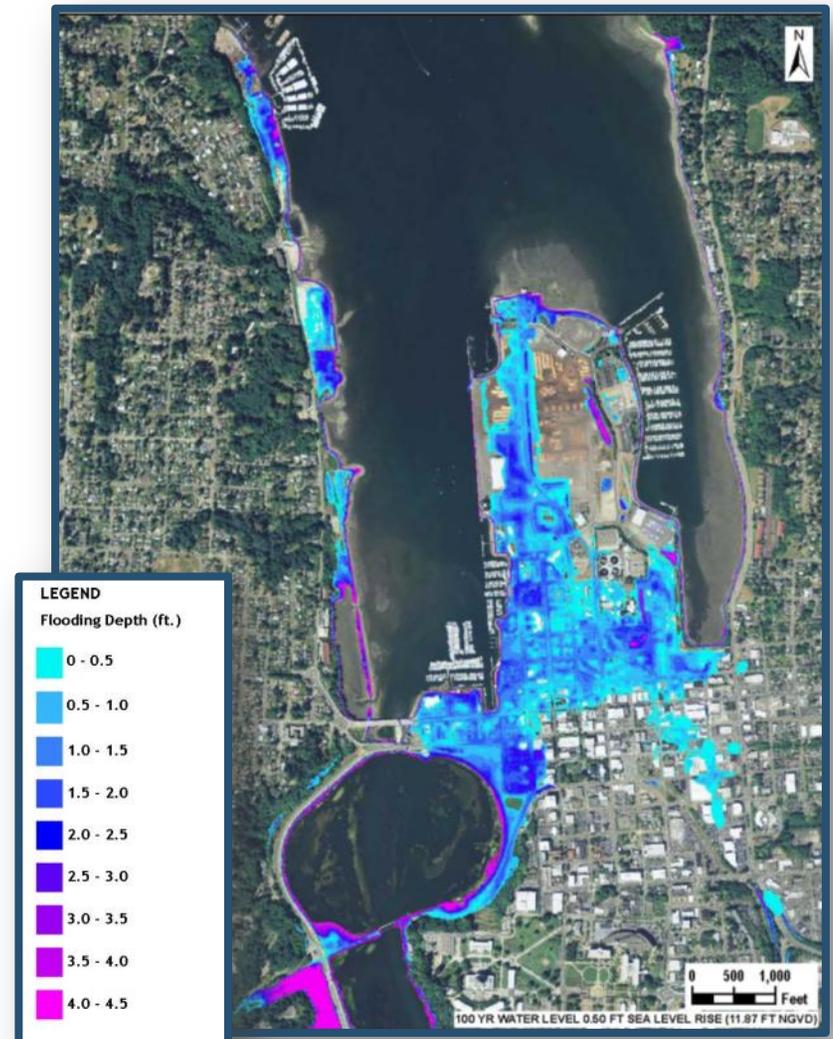
From *mitigation* to *adaptation* to *incorporation*

Focusing on one (highly visible) impact area: urban flooding

## Success:

- Year-after-year demand - and support – for work on climate change
- Short-term work-plans aimed at overall goal of reducing flooding risk
- SLR now in comp plan

**But:** no idea how to finance (huge\$\$)





## Case 2: Re-development & enviro clean-up with an eye towards SLR (Port of Bellingham)

---

Incorporating SLR projections into \$150m environmental clean-up and redevelopment of former mill site on Bellingham Bay (228 ac, 3 mi shoreline)

### **Success:**

- SLR projections included in grading & siting decisions
- Action helps with long-term resilience (green buffer)

**But:** How to get SLR planning into the port culture? No check-in points to update sea level rise scenarios







# Success:

## *A focus on next steps*

- What is “success” depends on where you are, right now  
*entrain key political leaders, implement statewide requirements for local governments, work with planning department*
- Focus on doing, not barriers
- More attention paid to successful *processes* than *outcomes*.





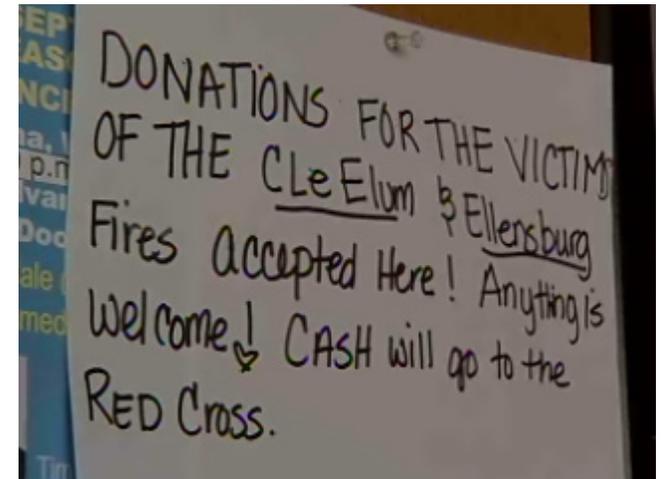
## Outcomes:

### *Where are we trying to go?*

---

*Success is ... if “we know we’ve done everything we can to protect our communities from harm.”*

- Avoiding negative impacts
- Reducing risks
- No net loss (recovery?) of existing valued resources
- Achieving “resilience”
  - Managing unavoidable consequences
  - Institutions that can *“adapt to deal with different short- and long-term issues”*





## Processes: *Do we have the necessary tools to get there?*

---

- Wide-spread (but not universal) assumption that we have the processes/tools we need
- **But** many believe incremental action will be insufficient:  
*succeeding at adaptation requires more than doing current job well*
- Adaptation as an evolutionary process
  - Build in ability to adapt programs/policies over time
  - Personal change



*“Our actions have to be transformational not transitional, we think we can rev up our old tools but we need new ones.”*



## Success: *Revisited*

- Given inevitable impacts, loss, conflicts & trade-offs, rapid change, little preparation & current trajectory: is *success* possible?
  - Measure “success” against climate change baseline, not today’s
  - Benefit in thinking carefully about where we want to go & how best to get there
  - Broaden to consider how we navigate along the way



*“When I think about success maybe its not correct, its not about the journey, its how we navigate, learn how to change itself”*



For more info:  
Amy Snover – [aksnover@uw.edu](mailto:aksnover@uw.edu)

Thanks to:

Project Team *Susi, Steve, Adina, Hannah, Lara*

Volunteer Student Notetakers  
*Laura Nelson, Haley Harguth, Max Gordon*

UW College of the Environment

West Coast Sea Grant Programs