



**THURSTON
CLIMATE
ADAPTATION
PLAN**

Presentation: Evaluating Actions

March 23, 2017



Evaluating Actions

► What's Done:

► February meeting:

- SAC selected action screening criteria (*right*).
- SAC reviewed and revised list of **129** actions.

► Early March:

- Project team made SAC edits, resulting in a net **108** actions.
- Project team organized actions by type (Incentives, Regulations, etc.)

Criteria		Answer Range
Magnitude:	How many red risks does this action address?	<i>One [1], Few [2-3], or Many [4+]</i>
Effectiveness:	Is this action a long-term solution (i.e., durable)?	<i>Yes or No</i>
	To what degree would this action reduce the red risk(s)?	<i>High, Medium, or Low</i>
	Is this action already being taken?	<i>Yes or No</i>
Side-effects:	Would this action have negative effects on project goals?	<i>Yes or No</i>
	Would this action have positive effects on project goals?	<i>Yes or No</i>
Equity:	Would the costs and benefits of this action be shared equally?	<i>Yes or No</i>



Small-Group Exercise

► Process:

► Split into 3 groups:

- Flooding & Erosion
- Transportation & Energy
- Wildfire & Hazard Response

► Screen each action using criteria (*right*)

► Consult list of actions/risks and project goals (*meeting binder*)

► Advice:

► Most actions affect several red risks ...

- Consider *average* degree to which the action would reduce the *red* risks
- Reword actions or strike risks with weak link to actions, if desired

► Make notes on posters as needed

Flooding & Erosion		Magnitude	Effectiveness		Side Effects	
		Red Risks (#)	Long-term (Y/N)	Degree (H/M/L)	Underway (Y/N)	Negative (Y/N)
<i>Education & Outreach Actions</i>						
19	Educate commercial and residential building owners about proper maintenance of low-impact development (LID) facilities that treat stormwater runoff on site. [Washington's municipal stormwater permit directs recipients to make LID the preferred and commonly used approach to site development, where feasible. Such facilities reduce stormwater runoff, flooding, and water pollution.]	6				
<i>Emergency Management Actions</i>						
16	Designate alternative travel routes when roads must be closed because of natural hazards (floods, landslides, wildfires).	4				
<i>Incentives Actions</i>						
150	Incentivize residents to install rain gardens and plant drought-tolerant landscaping, where feasible, to adapt to changes in seasonal precipitation. [Incentives could include utility rebates or credits] [U.S. EPA has published a handbook with "Water-Smart" landscaping tips for rain gardens and other parts of the yard: https://www3.epa.gov/watersense/docs/water-efficient_landscaping_508.pdf]	5				
<i>Infrastructure Management Actions</i>						
6	Relocate or retrofit low-lying roads vulnerable to sea-levels rise. [Transferred actions could include encouraging the federal government to raise Interstate 5 at the Nisqually Estuary and U.S. Highway 101 at Mud Bay.]	3				
20	Decouple remaining combined storm and sewer systems. [adds capacity, mitigates back-ups and outbreaks of water-borne disease]	2				
102	Install flood gates on stormwater outfalls that are connected to Puget Sound. [helps prevent back-ups during high tide/heavy rain events]	2				
103	Evaluate the cost of protecting versus relocating critical facilities located in areas at risk of inundation from rising sea levels. Build floodwalls around critical facilities deemed worth protecting. Also, identify and set aside areas to receive critical facilities that should be moved at the end of their useful lifespan.	2				



Next Steps

▶ Upcoming Meetings:

▶ April:

- ▶ SAC continues screening actions and integrates ideas from April 17 forum, as desired

▶ May:

- ▶ SAC reviews/revises draft list of priority actions (*if ready*)
- ▶ Earth Economics presents overview of Benefit-Cost Analysis (BCA)

▶ June:

- ▶ SAC selects actions for BCA
- ▶ SAC begins identifying leads, partners and timeline for actions

▶ July & August:

- ▶ No meetings scheduled (*meet if necessary*)

▶ September:

- ▶ Earth Economics presents results of BCA
- ▶ Project team presents update on draft plan development