

Risk Evaluation

Thurston Regional Planning Council

January 26, 2017

Overview:

In this step, the Stakeholder Advisory Committee (SAC) will evaluate strategies — *Take Action* or *Accept* — for the region’s climate change risks. The SAC also will begin mulling actions for such strategies.

What’s Done:

Risk Identification: On Oct. 27, (*Meeting 4*), the SAC identified about 130 climate change risks and 31 opportunities that intersect with the 12 project goals and 8 climate change stressor categories.

Risk Analysis: On Nov. 17 (*Meeting 5*), the SAC assessed each risk’s likelihood, consequence, spatial extent and time horizon. Stakeholders also made the following changes:

- Cut nine risks but added three others;
- Changed the wording of some risks to enhance clarity or eliminate redundancy;
- Changed “Increasing Storminess” stressor category to “Intensifying Precipitation” to more accurately describe the stressor

Risk Evaluation: The project team put the net 126 risks into the Consequence/Likelihood Matrix (*below*):

- **53** risks fall in the upper-right third of the matrix (*red*) — risks that are of highest consequence and likelihood
- **41** risks fall in the middle third (*yellow*);
- **32** risks fall in the lower-left third (*green*) — risks that are of lowest consequence and likelihood.

Consequence/Likelihood Matrix				
Likelihood	High	38, 39, 40, 41, 42, 93, 98, 108, 109, 122, 123,	6, 11, 14, 20, 21, 29, 30, 31, 32, 43, 61, 63, 78, 79, 82, 90, 92, 137, 138,	3, 7, 8, 10, 12, 13, 22, 24, 25, 26, 27, 28, 52, 54, 55, 58, 59, 62, 75, 76, 81, 83, 101, 102, 103, 104, 114,
	Medium	4, 5, 45, 46, 47, 66, 68, 94, 95, 96, 97, 111, 112, 124, 125, 126,	9, 15, 16, 17, 18, 19, 23, 33, 35, 36, 37, 64, 69, 80, 84, 86, 88, 89, 91, 105, 106, 107, 121, 132, 133, 139	56, 57, 77, 85, 87, 115, 120,
	Low	51, 67, 71, 72, 74, 99, 110, 113, 118, 119, 129, 135, 136,	1, 50, 65,	60, 116, 117, 131,
#s correspond with Risk Analysis Table		Low	Medium	High
Consequence				

What's Next:

The project team used the Consequence/Likelihood Matrix to select a draft strategy for each risk (see *handout*). Today (*Meeting 6*), the SAC will revise as necessary the draft strategy for the 53 **red** risks — those of highest consequence and likelihood. Such strategies include: *Take Action* or *Accept* (see below).

Strategy	Description
Take Action	Lower the consequence and/or likelihood of the risk.
Accept	Accept that consequences may occur and monitor (i.e., run the risk).

Definitions adapted from table on pg. 59 of EPA risk-assessment workbook.

- Taking action** means choosing to reduce the risk’s impacts by recommending actions (new or continuing) and determining leads and partners.

 - TIP:** All **red** risks, as well as **yellow** risks with near-term impacts (0-10 yrs.), are good candidates for this strategy.
 - If local public- or private-sector stakeholders do not have jurisdiction, we could recommend that an outside party take action and assist as we’re able. This strategy, known as “transferring,” may be appropriate for risks that affect built or natural assets that are managed by state or federal agencies (e.g., I-5 or the Nisqually Estuary) or outside parties (e.g., Tacoma Power).
- Accepting** a risk means continuing business as usual, monitoring, and reassessing the risk if and when impacts occur. According to EPA, reasons to accept a risk could include deeming there is a low consequence and/or likelihood occurrence, long time horizon (30+ years) before impacts are expected, or no suitable action available.

 - TIP:** All **green** risks, and **yellow** risks that are decades off, are good candidates for this strategy.

Evaluation Exercise: Split into two groups, and evaluate a strategy for each **red** risk assigned to your group. Start thinking about potential actions and leads associated with such strategies — but please stay high-level. We will refine strategies, actions, leads and partners during subsequent meetings. The logic diagram below may be helpful in this exercise.

