

# Risk Analysis

Thurston Regional Planning Council

November 2016

The Risk Analysis builds on the Risk Identification table that the Stakeholder Advisory Committee populated on Oct. 27 (Meeting #3). In that table, committee members identified climate change risks that intersect with the 12 project goals and 8 climate change stressor categories defined by the project team and the U.S. EPA [workbook](#) for risk-based adaptation plans.

The project team subsequently conducted an initial analysis of the Risk Identification table's more than 130 risks. The project team created a database and used the criteria below to evaluate each risk's likelihood, consequence, spatial extent and time horizon.

In today's exercise, Stakeholder Advisory Committee members will split into four groups to review and revise three project goals' risk analyses. Next, each group will report back to the full committee, and the project team will revise the risk analyses as necessary

- **Likelihood:** This is the probability of the climate risk impacting our community. To assess likelihood, please consider the scientific analysis in the project's Vulnerability Assessment, UW CIG's 2015 *State of Knowledge* report and other documents.
  - (A) Low
  - (B) Medium
  - (C) High
- **Consequence:** This is the magnitude of the risk's impact on the Sustainable Thurston goal. In other words — would we be able to achieve this goal were the risk to impact our community?
  - (A) Low (*life will go on; not as important as many other things; we could adjust*)
  - (B) Medium
  - (C) High (*major disruption; goal is out of reach or not even attainable*)
- **Spatial Extent:** This is the geographic area of the risk's impact.
  - (A) Site (*e.g., major bridge, roadway*)
  - (B) Place (*e.g., downtown Olympia, Nisqually Estuary, Alder Lake area, Yelm area*)
  - (C) Extensive (*most or all of the project area and/or Thurston County*)
- **Time Horizon:** This is when the risk's impacts would likely begin (e.g., high-impact problems that are already occurring may need attention sooner than problems decades out). ... Treat the time horizon for the risk as independent from the likelihood of the risk.
  - (A) More than 30 years
  - (B) 10-30 years
  - (C) 0-10 years