

# Multi-scenario Community Planning for Coastal Hazards

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Coastal Washington State is historically susceptible to a wide range of natural hazards ranging from relatively frequent threats like flooding, landslides and erosion to rare but potentially catastrophic events such as M9 earthquakes and tsunamis. Meanwhile, changing climatic conditions pose a growing threat to the region's coastlines and communities. The need for credible information and strategies for more effectively adapting and responding to both climate-driven changes and seismic hazards are obvious and immediate.

We propose to test new, values-centered, scenario-based planning to help communities prepare, respond and adapt to coastal hazards and climate change – specifically focusing on tsunamis and sea level rise.

We bring to this task: (1) a view of irreversible changes as opportunities for promoting proactive adaptive planning to build community resilience, social capital, and adaptive capacity, rather than vulnerability-centered short-to-medium-term hazard mitigation; (2) new techniques of participatory scenario building and evaluation that relate scientific and local knowledge; and (3) an action-research methodology that generates tangible benefits for the participating communities as well as improved practices for related professions and their client communities in the broader region.