

CASCADIA COMMUNITY-ENGAGED RESEARCH CLEARINGHOUSE: HELPING PACIFIC NORTHWESTERN COMMUNITY LEADERS AND PRACTITIONERS PREPARE FOR COASTAL HAZARDS



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The Cascadia Coastlines and Peoples Hazards Research Hub (Cascadia CoPes Hub)

- Funded by the National Science Foundation;
- Advances scientific knowledge of coastal hazards, disasters, and climate change risks faced by **communities in the Pacific Northwest**
- Over **100 researchers and coastal community partners** across Oregon, Washington, and Northern California;
- Seeks to understand **how coastal hazards may affect Cascadia coastal communities**;
- Researches strategies to **mitigate risks, enhance preparedness**, and respond effectively to **disasters and hazards**.



Collaboratories (in blue) where Hub members work on coastal hazards with community partners.

The Cascadia Community Engaged Research Clearinghouse (CCERC)

- Connects** community leaders and practitioners;
- Enhances local capacities** for mitigating and adapting to the effects of coastal hazards;
- Fulfills community **information needs**;
- Supports **local problem-solving** through **convergence research**, evaluation, technical assistance, and research translation.



cascadiacopeshub.org
cascadiacopeshub.org/ccerc/

Cascadia Community-Engaged Research Clearinghouse

CCERC

A PATHWAY FOR COMMUNITIES AND PRACTITIONERS TO CONNECT TO THE CASCADIA COPEs HUB

4 MECHANISMS TO SUPPORT COMMUNITY NEEDS:

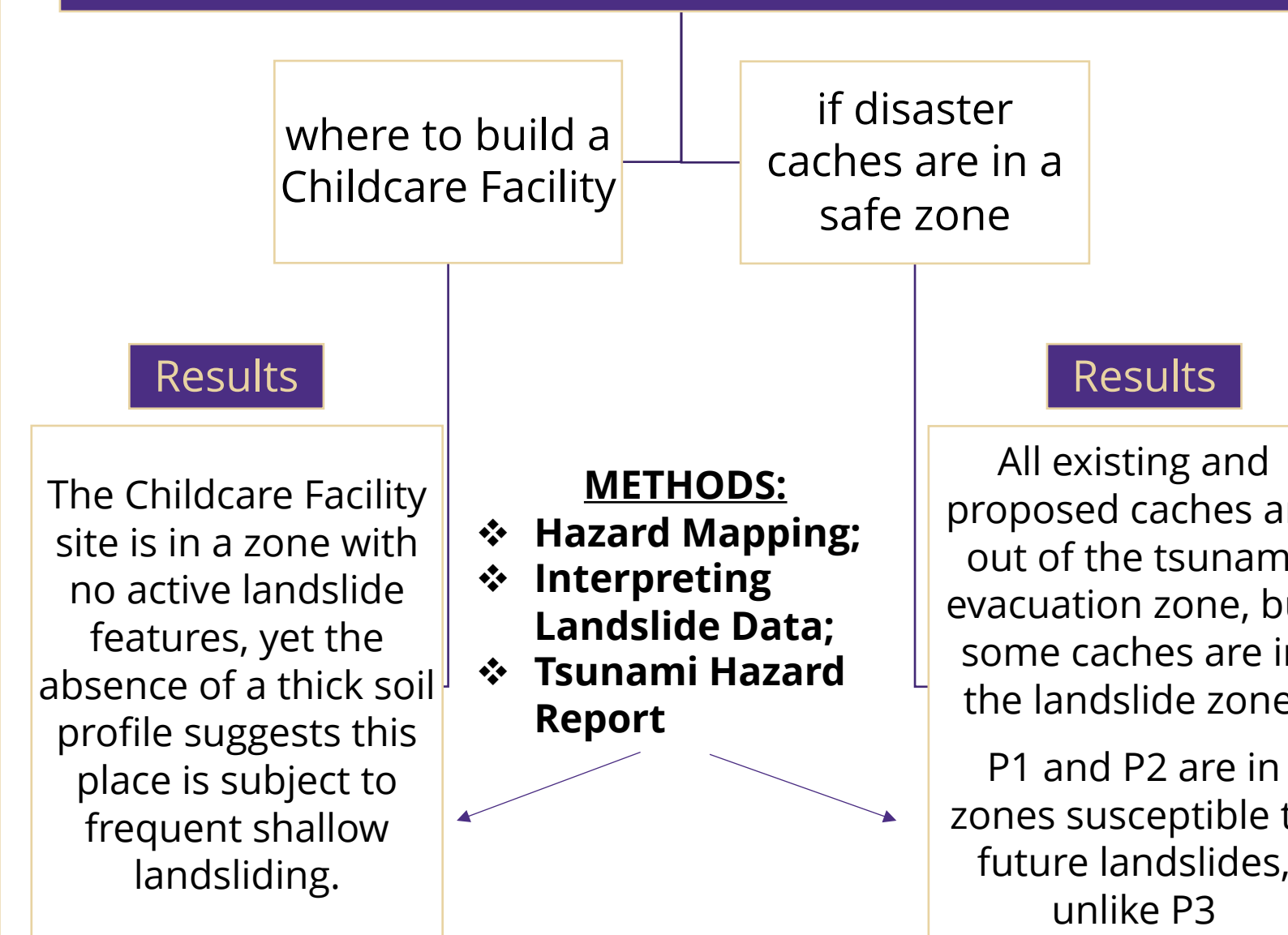
- Post Doctoral Coastal Community Liaisons
- Co-Production Studios + Labs
- Hub Researcher Expertise, Networks, & Resources
- Boundary Organization Leads

HOW IT WORKS:

- STEP 1** DEVELOP PATHWAY FOR COMMUNITY LEADERS & PRACTITIONERS TO SUBMIT PROPOSALS
- STEP 2** REVIEW PROPOSAL AND DETERMINES BEST ROUTE FOR COLLABORATION
 - Post Doctoral Coastal Community Liaisons
 - Co-Production Studios / Labs
 - Hub Research Leadership Team Pilot Project
 - Boundary Organization Leads
- STEP 3** CONNECT COMMUNITIES WITH APPROPRIATE CCERC RESEARCH TEAM
- STEP 4** FACILITATE COMMUNITY PARTNERSHIP AGREEMENTS / PROVIDE LOGISTICAL AND ADMINISTRATIVE SUPPORT
- STEP 5** PROVIDE AD-HOC TECHNICAL SUPPORT FOR RESEARCH DESIGN OR IMPLEMENTATION
- STEP 6** SUPPORT DISSEMINATION
 - In-person and Zoom presentations
 - Mini-workshops
 - Information sharing sessions
 - Poster session at annual all-Hub CoPes meeting

CCERC Request 1: Tsunami Inundation and Landslide Hazards

The City of Yachats on the Oregon coast faces risks of tsunami inundation, flooding, and landslide events. The Hub received a request from the Yachats community, aiming to understand the risks that Yachats face to assess:



Newport cache at Safe Haven Photo by Felicia Olmeta Schult

Supported by Hub Members: Larry Syu-Heng Lai; Joseph Wartman; Alison Duvall; Carrie Garrison-Laney; Bharathan Radhama Rajasree; Peter Ruggiero; John Bolte; Alessandra Burgos.



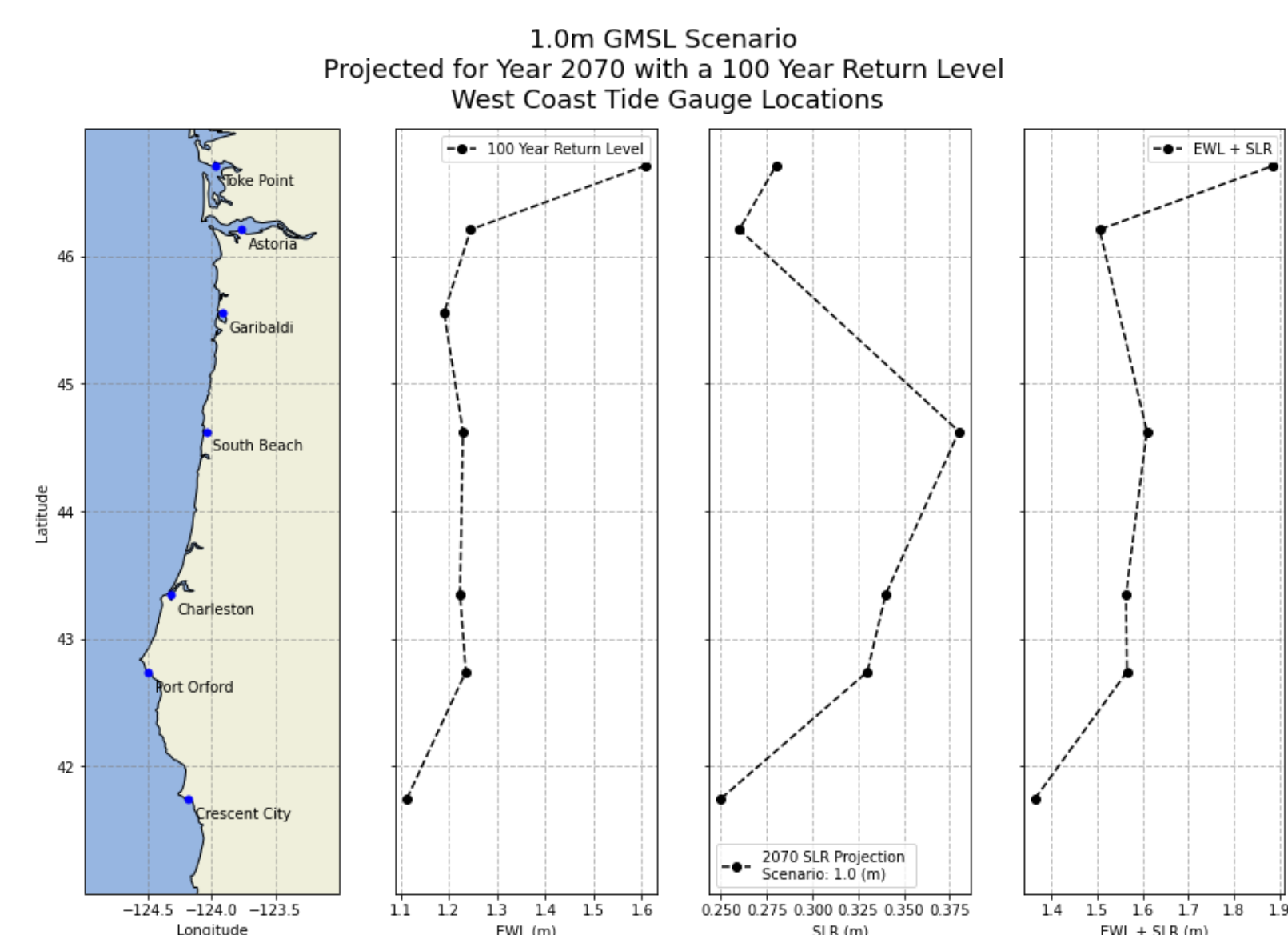
CCERC Request 2: Sea Level Rise Scenarios on the Oregon Coast

The Oregon Department of Land Conservation and Development sought assistance from The Hub in developing their new sea-level rise (SLR) toolkit.

The Hub utilized the latest sea-level rise (SLR) data from Sweet et al. (2022) to develop a versatile tool, enabling users to examine SLR projections by year (2020-2050), scenario, and location.

The information provided on 1, 1.5, and 2 ft of SLR helped create the newest SLR toolkit.

West Coast Projections of SLR and EWL (Intermediate Scenario)



Sweet, W. V., Hamlington, B. D., Kopp, R. E., Weaver, C. P., Barnard, P. L., Bekaert, D., ... & Zuzak, C. (2022). *Global and regional sea level rise scenarios for the United States: Updated mean projections and extreme water level probabilities along US coastlines*. National Oceanic and Atmospheric Administration.

