

Central Oregon Coastal Hazard Resilience Collaborative (COCHRC)

Sarah Bausmith, Dani Dolphin,
and Gabi Robb





Agenda

1

Foundation of Collaborative

2

Structure and Decision Making

3

Community Engagement

4

Long Term Sustainability

5

Measures of Success

Foundation of Collaborative

1

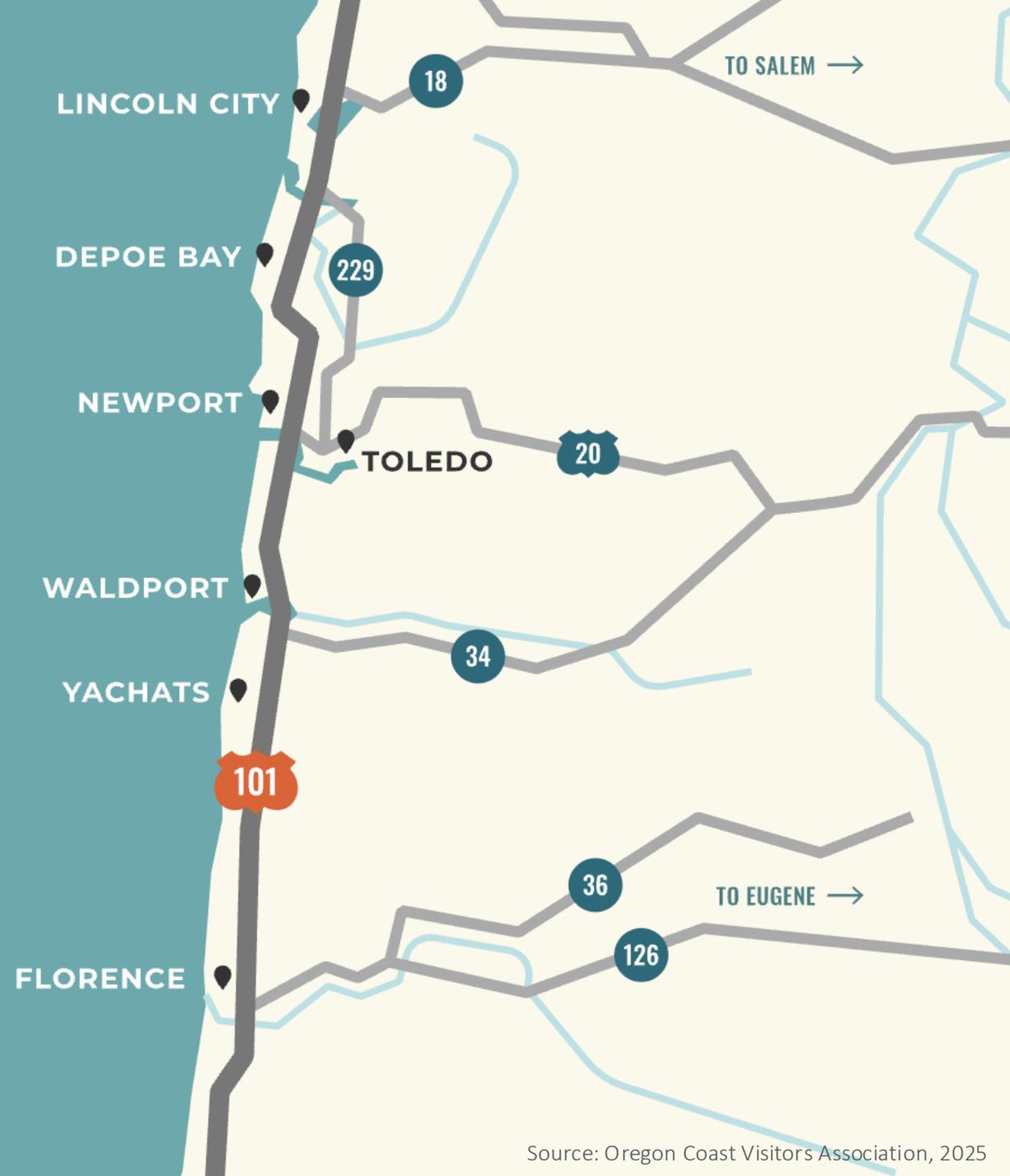


UNIVERSITY OF
OREGON

Institute for Policy
Research and Engagement

Oregon's Central Coast

- Florence to Lincoln City
- Seven key towns and cities
- Two counties



Case for Action

- Increasing hazard frequency and severity
- Public demand for climate adaptation
- Limited local capacity and technical support for resilience planning
- Lack of a regional collaborative network for coastal hazard resilience
- Statewide planning mandates and hazard mitigation requirements

Flooding



Source: Acker, 2025

Erosion



Source: Ruark, 2019

Tsunami



Source: 2025 Oregon Coastal Hazards Workshops, n.d.

Landslides



Source: Gaitán, 2023

Vision



Mission

An Oregon Coast where communities, ecosystems, and economies can prepare, respond, and recover from natural hazards through collaborative stewardship and resilience-focused planning.

To convene and facilitate cross-boundary partnerships that provide science-based tools, technical support, and coordinated strategies to help communities in the unique landscape of the Central Oregon Coast proactively reduce hazard risks and strengthen resilience.

Goals



Foster Cross-Boundary Collaboration across jurisdictions, sectors, and communities.



Advance Science-Based, Inclusive Decision-Making that values both research and community knowledge.



Promote Shared Stewardship of Oregon's coastal lands and ecosystems.



Shift to Proactive Adaptation through preparation, mitigation, and resilience-building.



Strengthen Regional Coordination to align strategies and reduce duplication of efforts.



Enhance Local Capacity with tools, training, and technical support for resilience planning.



UNIVERSITY OF
OREGON

Institute for Policy
Research and Engagement

Objectives

1. **Build a Network:** Establish the collaborative to connect organizations, agencies, tribal governments, nonprofits, and local jurisdictions.
2. **Improve Knowledge Sharing:** Create a centralized mechanism for sharing best practices, data, and tools. Develop a digital “encyclopedia” compiling NHMPs and local resilience plans for the Central Coast.
3. **Conduct Plan Assessment:** Review existing hazard mitigation and resilience plans to consolidate key actions and identify gaps.
4. **Prioritize and Delegate Actions:** Use recommendations from local plans to set priorities collaboratively. Assign actions across members to pool resources and share responsibility.
5. **Assess Community Need:** Develop and distribute a survey to gauge awareness of natural hazard risks and resilience needs.
6. **Increase Local Capacity:** Provide training and resources to help communities implement adaptation and resilience strategies.



Structure and Decision Making

2

O

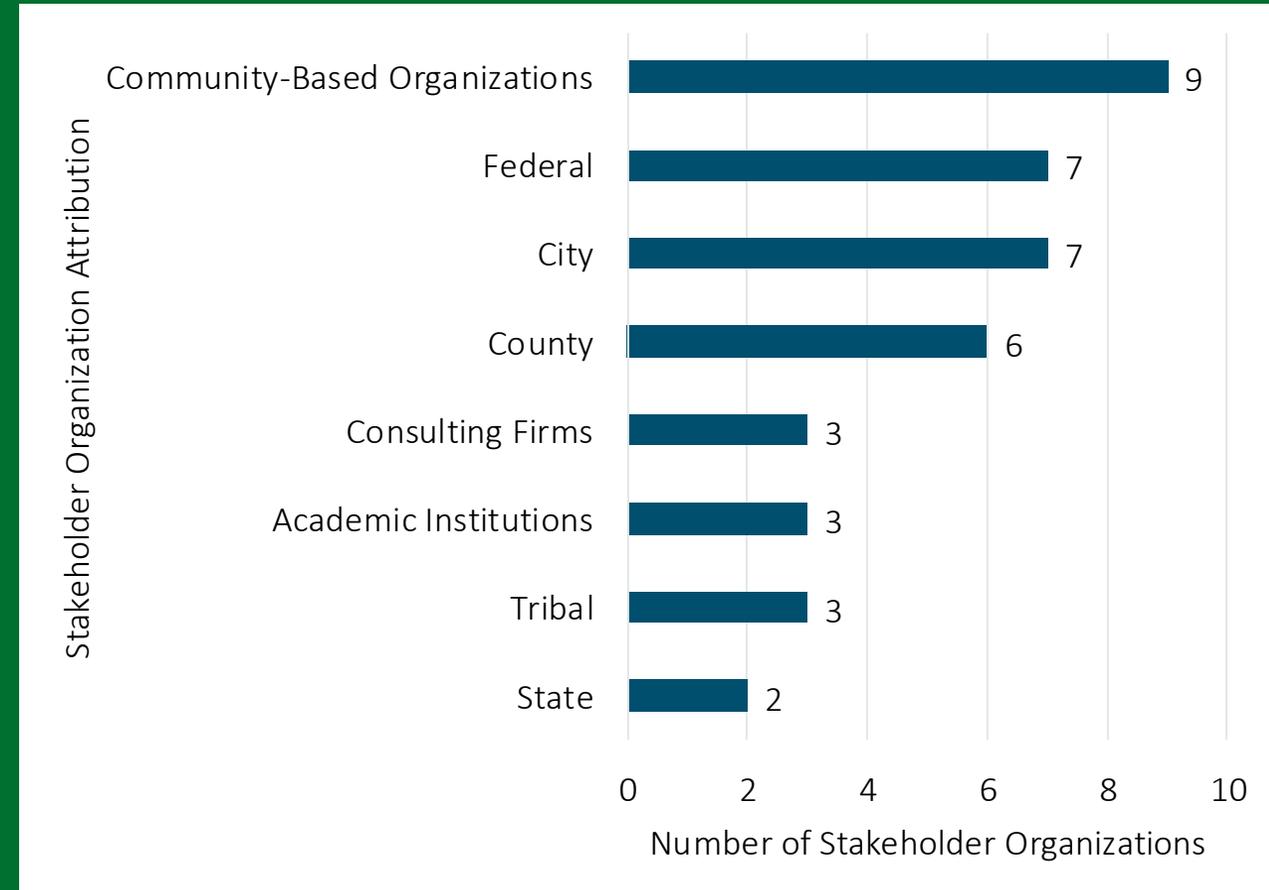
UNIVERSITY OF
OREGON

Institute for Policy
Research and Engagement

Stakeholders

- Stakeholders recognize “mutual benefit of pooling resources, sharing information, and coordinating efforts” (Margerum, 2011, p.74).
- Co-Managed by DLCDC (Natural Hazards Program), Oregon Sea Grant (OSU), and Oregon Partnership for Disaster Resilience (UO).
- Approximately 40 coastal hazards and disaster preparedness experts from federal, state, and local government agencies, tribes, academic institutions, consulting firms, and community-based organizations.
- Statewide planning goals, Goal 7
 - Requires coordination between state and local governments to protect people and property from natural hazards.

COCHRC Participant Agency Attribution



Trusted Community Leaders

COCHRC Stakeholder Grid

		Influence or Expertise on Issue	
		Low	High
Stake in Issue	High	Central Coast CERT Centro de Ayuda Oregon Shores	CTCLUSI Siletz Indians OREM Lane County Lincoln County DLCD CoPes Hub OPDR (UO) Oregon Sea Grant (OSU)
	Low		NOAA USGS



Source: Cascadia CoPes Hub

Stakeholder Analysis

Central Oregon Coastal Hazard Resilience Collaborative

Stakeholder	Interests	Level of Support
Affiliated Tribes of Northwest Indians	Preserving natural and cultural history; Representing Tribal perspective	High
CTCLUSI	Preserving natural and cultural history, protecting community	High
Confederated Tribes of Siletz Indians	Preserving natural and cultural history, protecting community	High
NOAA	Scientific research, public engagement	High
Dept of Land Conservation and Development	Natural hazard mitigation planning	High
Lane County	Short and long term hazard response and mitigation	High
Lincoln County	Short and long term hazard response and mitigation	High
ODHS OREM	State-level resilience	High
City of Depoe Bay	Community safety and preparedness	High
City of Florence	Community safety and preparedness	High
City of Lincoln City	Community safety and preparedness	High
City of Newport	Community safety and preparedness	High
City of Toledo	Community safety and preparedness	High
City of Waldport	Community safety and preparedness	High
City of Yachats	Community safety and preparedness	High
Cascadia CoPes Hub	Coastal community preparedness to hazards, scientific research	High
Oregon Sea Grant (OSU)	Healthy and resilient coastal communities and ecosystems	High
Oregon Partnership for Disaster Resilience (UO)	Help communities mitigate risks associated with natural hazards	High
Central Coast CERT	Community education, safety, and disaster preparedness. Neighborhood scale	High
Lane County COAD	Effective response to disasters	High
Lincoln County COAD	Effective response to disasters	High
North Lincoln County CERT	Community education, safety, and disaster preparedness. Neighborhood scale	High
Oregon Shores	Protect Oregon coastal ecosystems, educate coastal communities, resiliency	High

Stakeholder	Interests	Level of Support
USGS	Creation of scientific data	Moderate
Port of Alsea	Economic stake in coastal resilience, infrastructure	Moderate
Port of Newport	Economic stake in coastal resilience, infrastructure	Moderate
Port of Siuslaw	Economic stake in coastal resilience, infrastructure	Moderate
Cascadia Consulting Group	Environmental protection, community-centered research	Moderate
Sea and Shore Solutions	Coastal management, hazard mitigation	Moderate
Metro Planning, Inc.	Hazard mitigation planning	Moderate
Centro de Ayuda	Community safety and preparedness for diverse populations	Moderate
Oregon Coast Alliance	Protect Oregon coastal ecosystems	Moderate
Oregon Coast Visitors Association	Tourist safety, economic interest	Moderate
Oregon Ocean Alliance	Protect Oregon coastal ecosystems	Moderate
The Bureau of Land Management (BLM)	Sustain health of public lands	Low
FEMA	Providing aid during and after disasters. Safer, stronger and more prepared nation.	Low
National Forest Service	Preservation of Siuslaw National Forest Land	Low
National Weather Service	Weather data, timely hazard notification	Low
USACE	Infrastructure planning	Low
Oregon Dept of Ag - Natural Resources	Protect Oregon's natural resources	Low

Collaborative Structure

Steering Committee

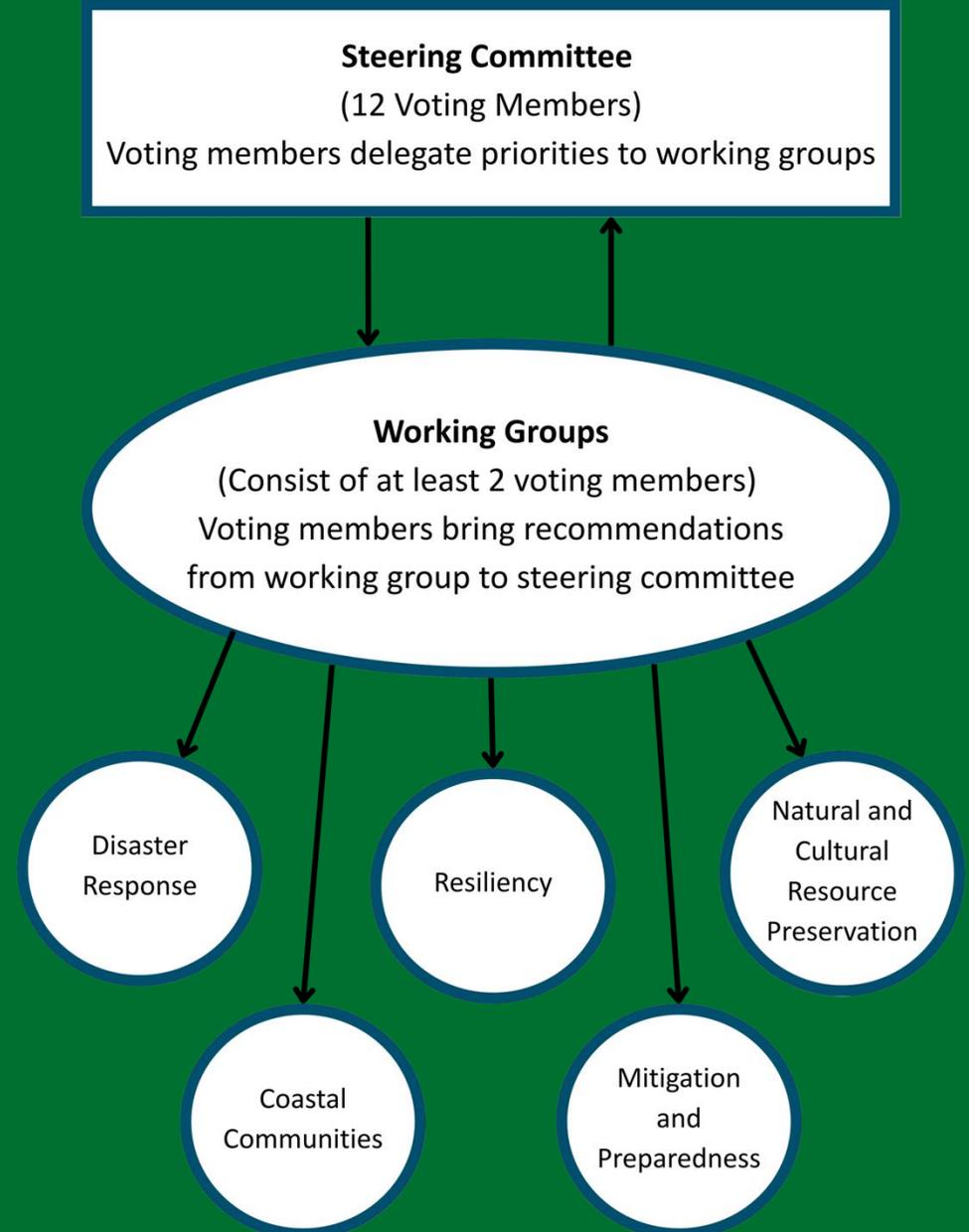
- Volunteer, two-year terms
- Highly competent members who are experts in their fields

Working Groups

- Informal
- Anyone interested in the topic allowed to join to “enable deliberation, interim decision making, and trust building” (Swette, 2023, p.7)
- Embed work in communities and bring back to larger group (Margerum, 2011)

All stakeholders act as liaisons to their organization/community

COCHRC Structure and Voting Membership



Decision Making

Steering Committee

- Twelve-members with voting power
- 70% Rule (Linden, 2010)

Working Groups

- Voting members bring recommendations from Working Groups to Steering Committee - reciprocal relationship

Priority Action Ranking

- Implemented by lead partners, steering committee members and associated organizations, and new partners
- Implementation contingent on resources and capacity

Public Participation

- Input on priorities through public open house
- Consistent outreach and updates provided to public

COCHRC Priority Action Ranking Example

Five Criteria for Ranking Actions

	TOTAL SCORE	Symbol Key:					Working Group	Lead Partner
		Strong Agreement	Mild Agreement	Neutral	Mild Disagreement	Strong Disagreement		
Create inventory of natural and cultural resources on Central Coast. Cross reference with current vulnerability indexes.	16	●	●	○	○	●	Natural and Cultural Resource Preservation	Oregon Shores
Develop encyclopedia of current Hazard Mitigation Plans for Central Coast Cities and Counties	16	●	●	●	○	○	Mitigation and Preparedness	DLCD
Identify vulnerable communities subject to increased burden of climate change and coastal hazards.	15	●	◐	◐	○	○	Coastal Communities	Oregon Sea Grant
Conduct assessment on best practices for disaster response and recover efforts.	15	●	◐	◐	◑	●	Disaster Response	UO OPDR

Adapted from Joyce et al., 2012

Community Engagement

3



UNIVERSITY OF
OREGON

Institute for Policy
Research and Engagement

Engaging Marginalized and Underrepresented Communities

Community involvement in Working Groups

Systematic recruitment (Rongerude & Sandoval, 2016):

- Community Profile: Analyze demographics to identify vulnerable/underrepresented groups
- Community-Led Approach: Input on preferred engagement methods

Accessibility:

- Language: Translate materials with community input
- Materials: Clear, free of jargon, multiple formats
- Location: Accessible spaces (Rongerude & Sandoval, 2016)
- Eliminate Barriers: Provide childcare, food, compensation, and hold meetings at various times/locations (Rongerude & Sandoval, 2016)

DIAD Network Dynamics

Characteristics
of
Participants

Diversity
of Interests

Interdependence
of Interests

Results of
Authentic Dialogue

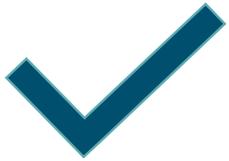
Authentic Dialogue

Reciprocity
Relationships
Learning
Creativity

Adaptations
of the System

Shared Identities
Shared Meanings
New Heuristics
Innovation

Public Engagement Activities



Public Priority-Setting:

- Public voting to establish collaborative priorities
- Annual input sessions (held by Steering Committee)
- Information sharing at standing public meetings



Community Action:

- Volunteer Days:
 - Clear trash/debris, identify hazard areas
 - Establish and distribute emergency resources
 - Connect the community to collaborative work



Informing Scientific Processes:

- Citizen science projects



Long Term Sustainability

4



UNIVERSITY OF
OREGON

Institute for Policy
Research and Engagement

Long-Term Sustainability

- Founding document with clearly outlined responsibilities and principles, e.g. respect, transparency (Margerum, 2011, p. 151)
- Continuity as membership grows and changes
 - Prioritize clear documentation, create onboarding materials and processes for new members
- Commitment from high-level, visible leaders
 - Focus on commitment to process (p. 150)
- Diversified funding sources
- Contingency plans
 - E.g. hiring a mediator when conflict arises

Five Factors for Sustaining COCHR

Factors	Measures of Factors
Board leadership and capacity: Effective leadership and capacity	<ul style="list-style-type: none">• Leaders with collaborative and technical skills
Collaborative stability: Stable staffing and participation	<ul style="list-style-type: none">• Foster relationships and trust among collaborative members• Funding levels and diversity
Information capacity: Information, data, and scientific capacity	<ul style="list-style-type: none">• Collaborative as a trusted source of information and data• Prioritize information management
Commitment: Ongoing commitment by stakeholders and their organizations	<ul style="list-style-type: none">• Interpersonal trust and social capital• Mutual benefits of shared resources
External pressures: Influences that encourage participants to maintain participation	<ul style="list-style-type: none">• Monitoring progress and spotlighting issues• Regulatory pressures

Scope	Funding Source	Purpose of Funding	Strategy to Obtain Funding
Federal / State	NOAA Coastal Resilience Grants	Supports projects that reduce coastal hazard risks and enhance resilience.	Apply for funding to develop collaborative network infrastructure and produce vulnerability assessments.
Federal / State	FEMA Hazard Mitigation Grant Program (HMGP)	Funds hazard mitigation projects post-disaster and for resilience planning.	Partner with counties to integrate collaborative objectives into HMGP proposals.
Regional / Local	Tourism & Economic Development Grants	Coastal resilience protects tourism assets and local economies.	Coastal resilience protects tourism assets and local economies.
Regional / Local	City/County Hazard Mitigation Funds	Local governments allocate funds for hazard mitigation planning.	Offer technical support and collaborative tools in exchange for cost-sharing.
Academic	OSU – Oregon Sea Grant	Provides funding for coastal research, education, and outreach.	Co-develop proposals for community engagement and knowledge-sharing platforms.
Academic	NSF Coastlines and People (CoPe) Program	Supports interdisciplinary research on coastal hazards and resilience.	Collaborate with OSU and CoPes Hub to integrate applied research into network activities.
Nonprofit Partnerships	Oregon Ocean Alliance / Oregon Shores	Co-apply for grants (NOAA, NFWF) to leverage shared goals in stewardship and resilience.	Shared resources and expanded reach for community engagement.
Other / Innovative	Corporate Sponsorships (Tourism & Fisheries)	Engage Oregon Coastal Visitors Association and local businesses to sponsor resilience workshops or tools.	Aligns business interests with long-term coastal sustainability.

Measures of Success

5



UNIVERSITY OF
OREGON

Institute for Policy
Research and Engagement

Evaluation Methods and Measurements of Success

Surveys



- Initial public survey to gauge understanding of local natural hazard risks and community needs
 - Sent within the first year of operation
- Follow-up survey to gauge how well community feels collaborative has helped to address risks and needs
 - Every 3-4 years

Progress Reports



- Contracted externally
- Yearly, starting first year
 - Highlighting strengths, weaknesses, capacity gaps, percentage of projects completed, assessment of membership diversity



We envision a future where coastal communities, ecosystems, and economies are more prepared to respond and recover from natural hazards through increased collaboration, resource pooling, and knowledge-sharing to build a more resilient Oregon.



Thank you!

Questions?

References

2025 Oregon Coastal Hazards Workshops. (n.d.) Oregon Department of Emergency Management. <https://www.oregon.gov/oem/hazardsprep/pages/2025-coastal-hazards-workshops.aspx>.

Acker, L. (2025, October 28). Dramatic video shows dangerous high tides on Oregon coast. The Oregonian - Oregon Live. <https://www.oregonlive.com/weather/2025/10/dramatic-video-shows-dangerous-high-tides-on-oregon-coast.html>.

Gaitán, C. (2023, January 13). Landslide closes portion of U.S. 101, hinders communities on Oregon's south coast. The Oregonian - Oregon Live. <https://www.oregonlive.com/pacific-northwest-news/2023/01/landslide-closes-portion-of-us-101-hinders-communities-on-oregons-south-coast.html>.

Innes, J. E. and Booher, D. E. (2010). DIAD Methodology. *Planning with Complexity - An Introduction to Collaborative Rationality for Public Policy* (1st ed.). Routledge.

Joyce, B., Souder, J., & Cornu, C. E. (2012). *Partnership for Coastal Watersheds Action Plan*. South Slough National Estuarine Research Reserve and Coos Watershed Association.



References cont.

- Linden, R. M. (2010). *Leading across boundaries: Creating collaborative agencies in a networked world* (1st ed.). Jossey-Bass.
- Margerum, R. D. (2011). *Beyond consensus: Improving collaborative planning and management* (1st ed.). MIT Press.
- Rongerude, J. and Sandoval, G. F. (2016). From the table to the street: strategies for building a more inclusive collaborative process.
- Ruark, J. C. (2019, March 5). ENVIRONMENT: Beach erosion on the increase. Lincoln County Leader. https://www.thenewsguard.com/news_paid/environment-beach-erosion-on-the-increase/article_99f81d74-3471-11e9-b64c-872cb9c76eb7.html.
- Swette, B., L. Huntsinger, and E. F. Lambin. 2023. Collaboration in a polarized context: lessons from public forest governance in the American West. *Ecology and Society* 28(1):29. <https://doi.org/10.5751/ES-13958-280129>
- Vogler, D., Macey, S., & Sigouin, A. (n.d.). *Stakeholder Analysis in Environmental and Conservation Planning*.



Appendix

COCHRC Stakeholder Reference Sheet

Level	Stakeholder	Interests	Level of Support	Website
Tribal	Affiliated Tribes of Northwest Indians	Preserving natural and cultural history; Representing Tribal perspective	High support	https://atntribes.org/
	CTCLUSI	Preserving natural and cultural history, protecting community	High support	https://ctclusi.org/
	Confederated Tribes of Siletz Indians	Preserving natural and cultural history, protecting community	High support	https://ctsi.nsn.us/
Federal	The Bureau of Land Management (BLM)	Sustain health of public lands	Low support	https://www.blm.gov/
	FEMA	Providing aid during and after disasters. Creating a safer, stronger and more prepared nation.	Low support	https://www.fema.gov/
	National Forest Service	Preservation of Siuslaw National Forest Land	Low support	https://www.fs.usda.gov/
	National Oceanic and Atmospheric Administration (NOAA)	Scientific research, public engagement	High support	https://www.noaa.gov/
	National Weather Service	Weather data, timely hazard notification	Low support	https://www.weather.gov/
	USACE	Infrastructure planning	Low support	https://www.usace.army.mil/
	USGS	Creation of scientific data	Moderate support	https://www.usgs.gov/
State	Dept of Land Conservation and Development	Natural hazard mitigation planning	High support	https://www.oregon.gov/lcd/pages/index.aspx
	Oregon Dept of Ag - Natural Resources Program	Protect Oregon's natural resources	Low support	https://www.oregon.gov/oda/natural-resources/pages/default.aspx
County	Lane County	Short and long term hazard response and mitigation	High support	https://www.lanecountyor.gov/
	Lincoln County	Short and long term hazard response and mitigation	High support	https://www.co.lincoln.or.us/
	ODHS Office of Resilience and Emergency Management	State-level resilience	High support	https://www.oregon.gov/odhs/emergency-management/pages/about.aspx
	Port of Alsea	Economic stake in coastal resilience, infrastructure	Moderate support	https://www.portofalsea.com/
	Port of Newport	Economic stake in coastal resilience, infrastructure	Moderate support	https://www.portofnewport.com/
	Port of Siuslaw	Economic stake in coastal resilience, infrastructure	Moderate support	https://portofsiuslaw.com/
City	City of Depoe Bay	Community safety and preparedness	High support	https://siuswcd.com/
	City of Florence	Community safety and preparedness	High support	https://www.ci.florence.or.us/
	City of Lincoln City	Community safety and preparedness	High support	https://www.lincolncity.org/home
	City of Newport	Community safety and preparedness	High support	https://www.newportoregon.gov/
	City of Toledo	Community safety and preparedness	High support	https://www.waldportoregon.gov/
	City of Waldport	Community safety and preparedness	High support	https://www.yachatsoregon.org/
	City of Yachats	Community safety and preparedness	High support	https://www.cityoftoledo.org/
	Academic Institutions	Cascadia CoPes Hub	Coastal community preparedness to hazards, scientific research	High support
Oregon Sea Grant (OSU)		Healthy and resilient coastal communities and ecosystems	High support	https://seagrant.oregonstate.edu/
UO (Oregon Partnership for Disaster Resilience)		Help communities mitigate risks associated with natural hazards	High support	https://ipre.uoregon.edu/programs/opdr/
Consulting Firms	Cascadia Consulting Group	Environmental protection, community-centered research	Moderate support	https://cascadiaconsulting.com/
	Sea and Shore Solutions	Coastal management, hazard mitigation	Moderate support	https://sea-shoresolutions.com/
	Metro Planning, Inc.	Hazard mitigation planning	Moderate support	https://www.metroplanning.com/
Community-Based Organizations	Central Coast CERT	Community education, safety, and disaster preparedness. Neighborhood scale	High support	https://coastcert.samariteam.com/Default.aspx
	Centro de Ayuda	Community safety and preparedness for diverse populations	Moderate support	https://ststephenepiscopal.org/centro-de-ayuda.htm
	Lane County COAD	Effective response to disasters	High support	https://www.lanecountycoad.org/
	Lincoln County COAD	Effective response to disasters	High support	https://business.newportchamber.org/list/Details/lincoln-county-coad-community-organizations-active-in-disaster-2917858
	North Lincoln County CERT	Community education, safety, and disaster preparedness. Neighborhood scale	High support	https://nlccert.blogspot.com/
	Oregon Coast Alliance	Protect Oregon coastal ecosystems	Moderate support	https://oregoncoastalliance.org/
	Oregon Coast Visitors Association	Tourist safety, economic interest	Moderate support	https://visittheoregoncoast.com/regions/central-coast/
	Oregon Ocean Alliance	Protect Oregon coastal ecosystems	Moderate support	https://www.oregonoceanalliance.org/
Oregon Shores	Protect Oregon coastal ecosystems, educate coastal communities, resiliency	High support	https://oregonshores.org/	



UNIVERSITY OF OREGON