Appendix B: Outreach Analysis

Washington Coast Resilience Action Demonstration Project

Shorelands and Environmental Assistance Program
Washington State Department of Ecology
Olympia, WA

&

Washington Sea Grant
Seattle, WA

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The Resilience Action Demonstration Project (RAD) was a 24-month (2019–2021) pilot program that enhanced local capacity to address coastal hazards issues across Washington's Pacific Coast. The RAD team tested the logistics of the proposed inter-agency Coastal Hazards Organizational Resilience Team (COHORT) and gathered lessons learned for the implementation of a long-term COHORT initiative. In doing so, the RAD team advanced community-driven hazards resilience projects by connecting communities with scientific and technical expertise, coordinated agency support, and funding. Through research, outreach, and targeted support for locally driven projects, the RAD team identified strategies for improving and better coordinating state hazards assistance to Washington's coastal communities, in service of long-term pre-disaster risk reduction and resilient communities.

The RAD was conducted as a partnership between Washington's Coastal Zone Management Program, housed at the Washington State Department of Ecology, and Washington Sea Grant. Many partners and collaborators were instrumental in the success of the RAD. They are listed in the acknowledgments section of the final report.

A Coastal Zone Management Project of Special Merit grant from the NOAA Office for Coastal Management (grant #NA19NOS4190144) provided primary funding for the RAD.

Additional information about the report and its appendices can be found on the RAD webpage,[1] which is hosted by the Washington Coastal Hazards Resilience Network.

Appendix B cover photo credit: Tressa Arbow / Washington State Department of Ecology, 2020

[1] https://wacoastalnetwork.com/resilience-action-demonstration-project/

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Introduction

Purpose of the RAD Outreach Analysis

The Resilience Action Demonstration Project (RAD) outreach phase began at the outset of the project in November 2019. This appendix describes the RAD team's outreach to local organizations, government agencies, and Tribes from the coastal hazards resilience community of practice across Washington's Pacific Coast. This outreach informed the development of the overall RAD strategy and the ensuing stages of the project. The analysis of the results of the outreach produced a list of potential opportunities to support coastal hazards risk reduction based on local perspectives (described within this appendix) as well as an inventory of potential coastal hazards risk reduction projects across Washington's Pacific Coast (Appendix C: Project inventory Analysis).

The goals of this outreach analysis were to:

- Gather information about coastal hazards projects across the Pacific Coast of Washington State to produce the RAD project inventory.
- Identify common themes that support or inhibit these projects across the region.
- Support the development of the Resilience Principles for Coastal Hazards Projects (Appendix D) in combination with the results of the analysis of 2020 coastal hazards grant programs (Appendix A).

This analysis informed next steps and deliverables of the RAD but it may also be used to supplement the Resilience Principles for Coastal Hazards Projects by providing additional examples of ways that projects can support coastal hazards risk reduction and resilience.

Methods

Outreach process

The RAD team's outreach began at the outset of the project and continued through the project's completion in 2021. Beginning in November 2019, an initial inventory of coastal hazards projects was compiled by Ecology and WSG during regular meetings of the Coastal Marine Resources Committees (MRCs). These MRCs are the Wahkiakum County MRC, Pacific County MRC, Grays Harbor County MRC, and the North Pacific Coast MRC, which represents western Jefferson and Clallam Counties (Figure 1). MRCs were chosen as an initial outreach audience due to the broad range of interests that they represent. Their membership covers: government (Tribal, federal, state, county, city), parks and preserves, conservation and environment, Tribal interest, local citizens, education, science, recreation, sport fishing, commercial fishing, aquaculture, ports, and economic groups.[2]

Next, the RAD team met with state agency staff and coastal counties' emergency managers to supplement this initial inventory. This step also involved analysis of available existing documents in order to identify coastal hazards projects,[3] including all current hazard mitigation plans and FEMA risk reports for the region.

The final outreach step was a series of conversations with project proponents, through which the RAD team gathered information on projects already identified and also identified additional projects.

The content and dates of these conversations are described below:

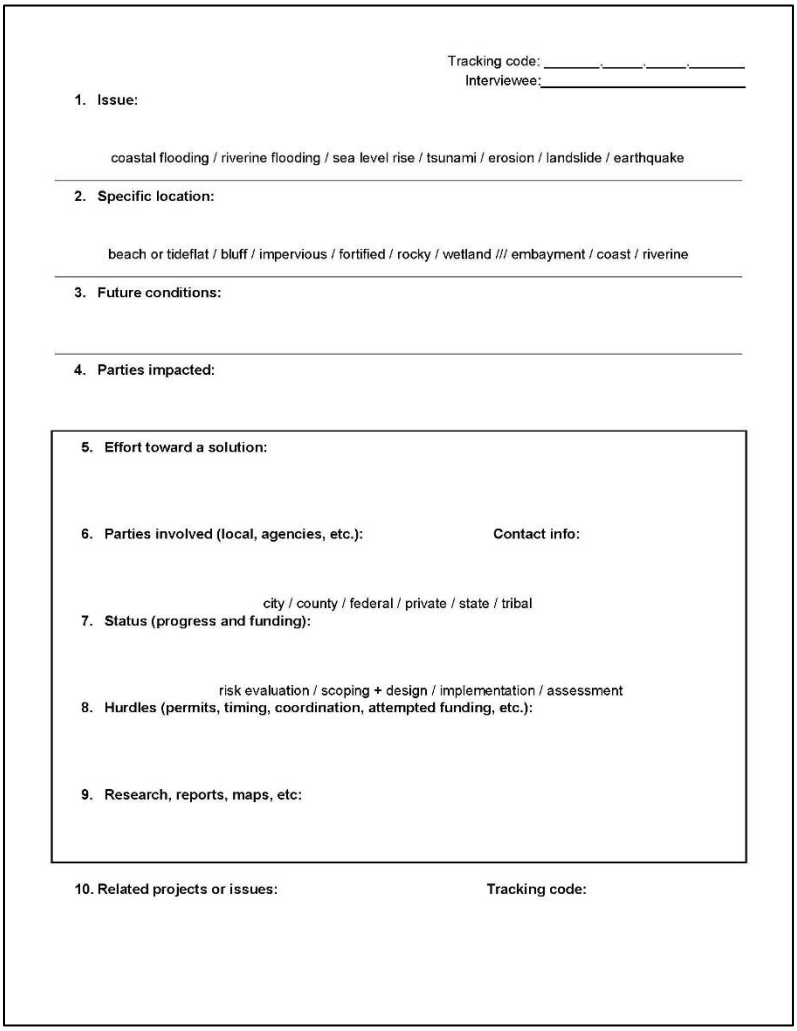
- MRCs (November 2019–January 2020):
    - discussion of local concerns regarding coastal hazards resilience
    - focused mapping activity to identify ongoing or potential coastal hazards projects and project representatives (Figure 2)
- State agencies and coastal counties' emergency managers (January–February 2020):
    - discussion of local concerns regarding coastal hazards resilience
    - identification of ongoing or potential coastal hazards projects and project representatives
    - opportunities and hurdles for supporting coastal hazards resilience projects
    - analysis of existing documents such as Hazard Mitigation Plans and FEMA Risk Reports

[2] http://pubs.cahnrs.wsu.edu/impact-reports/wahkiakum-county-marine-resources-committee/ ; http://pacificcountymrc.com/ ; http://www.co.grays-harbor.wa.us/departments/public_services/MarineResourcesCommittee/index.php ; https://www.jeffersoncountypublichealth.org/715/North-Pacific-Coast-Marine-Resources-Com

[3] The RAD team made a distinction between coastal hazards *risks* or *threats*, and specific *projects.* The latter moves beyond identification of risk and describes interest or momentum to address the risk by a local project proponent. For the purposes of the RAD, the team focused on projects rather than stand-alone issues.

- Project proponents: Tribes, cities, county special districts, others per steps 1-2 (February–March 2020)
    - description of hazard issue
    - description of effort toward a solution:
    - parties involved and related projects
    - status of effort (progress and funding)
    - opportunities and hurdles affecting the project's progress

These conversations were based on a standardized project tracking template (Figure B-1).



Tracking code: _____._____._____._____
Interviewee:_____

1. **Issue:**

coastal flooding / riverine flooding / sea level rise / tsunami / erosion / landslide / earthquake

2. **Specific location:**

beach or tideflat / bluff / impervious / fortified / rocky / wetland /// embayment / coast / riverine

3. **Future conditions:**

4. **Parties impacted:**

5. **Effort toward a solution:**

6. **Parties involved (local, agencies, etc.):** **Contact info:**

city / county / federal / private / state / tribal

7. **Status (progress and funding):**

risk evaluation / scoping + design / implementation / assessment

8. **Hurdles (permits, timing, coordination, attempted funding, etc.):**

9. **Research, reports, maps, etc:**

10. **Related projects or issues:** **Tracking code:**

Figure B-1. Project tracking template used to guide conversations and collect information on coastal hazards projects during initial RAD outreach.

List of organizations interviewed

Through the steps described above (November 2019–March 2020), the RAD team received input from the following organizations, agencies, and Tribes during the project's outreach phase. The RAD team reached out to additional organizations and individuals besides those listed below, but was unable to connect—likely due to ramifications related to the onset of the COVID-19 pandemic.

Wahkiakum County
- Wahkiakum County MRC
- Wahkiakum County Public Works

Pacific County
- City of Long Beach
- Pacific Conservation District
- Pacific County Drainage District #1
- Pacific County Emergency Management Agency
- Pacific County MRC
- Washaway No More

Grays Harbor County
- City of Aberdeen
- City of Hoquiam
- City of Ocean Shores
- City of Westport and Westport Tsunami Safety Committee
- Grays Harbor Conservation District
- Grays Harbor Emergency Management
- Grays Harbor MRC

Jefferson and Clallam Counties
- Jefferson County Emergency Management
- North Pacific Coast MRC

Washington State
- Lower Columbia Estuary Partnership
- University of Washington Institute for Hazard Mitigation Planning and Research
- Washington Sea Grant
- Washington State Department of Natural Resources
- Washington State Emergency Management Division

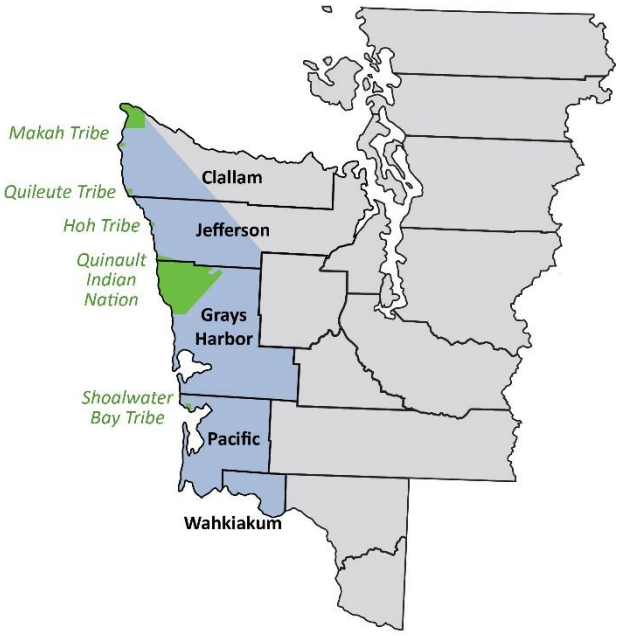


Figure B-2. The Washington Pacific Coast region represented by the Coastal MRCs and assessed through the RAD. Image provided by Cathy Shwartz/Washington Sea Grant.

Washington State (continued)
- Washington State Department of Ecology Shorelands and Environmental Assistance Program
- Washington State Department of Ecology Southwest Regional Office
- Washington State University Extension

Federally Recognized Tribes
- Hoh Tribe
- Makah Tribe
- Quileute Tribe
- Quinault Indian Nation
- Shoalwater Bay Indian Tribe

Outreach Results: Analysis of Interviews

This section contains themed takeaways from the interviews described above, along with lessons learned from completed coastal hazards risk reduction projects.[4] These are framed below as opportunities for the RAD, COHORT, or other initiatives to support coastal resilience and coastal hazards risk reduction[5] efforts in three main areas:

- Project scoping
- Collaboration and partnerships
- Funding

Project scoping[6]

In addition to reporting on specific projects described in the RAD Project Inventory Analysis (Appendix C), interviewees described ways that projects could be scoped to have more enduring or multi-benefit results.

Generalized components of **projects that address specific complex, enduring, and emerging issues** include:

- Maintaining value of shorelines (economic, recreational, ecological, etc.) while increasing resilience to coastal hazards.
- Assisting jurisdictions with managing land use, land-related tax base, and jurisdictional footprints in service of hazards resilience. This has potential to increase jurisdictional revenues, increase options for siting vertical evacuation projects, and facilitate upland realignment of infrastructure.
- Working on projects that address multiple hazards/issues in one place or region. To this point, one local resource manager stated, "We have a lot going on trying to protect this little village from Mother Nature!"
- Assisting projects that address adjacent or synergistic issues across multiple land management regimes.
- Supporting batches of projects rather than stand-alone efforts (such as multiple vertical evacuation towers).
- Supporting coastal hazards resilience efforts that are politically unpopular locally, due to the local cost burden.

[4] To view case studies of these projects, visit the Washington Coastal Hazards Resilience Network's Risk Reduction Project Mapper: https://waecy.maps.arcgis.com/apps/MapSeries/index.html?appid=cb81314d6fb44e0187e7980a1f0cd32b

[5] Coastal hazards risk reduction alone does not necessarily support coastal hazards resilience. Contributing to resilience may entail a more robust approach, as described in the Ruckelshaus Center's 2017 *Washington State Coast Resilience Assessment* (https://mrsc.org/getmedia/0498ef44-89e8-46c7-b834-469b992196c6/Washington-Coast-Resilience-Assessment-Report.aspx) and the Resilience Principles for Coastal Hazards Projects (Appendix D).

[6] As described in RAD Analysis of 2020 Coastal Hazards Resilience Grant Programs and Resilience Principles for Coastal Hazards Projects, a project is defined as a physical project, community development effort (capacity building, strategy development, planning, etc.), and/or educational activity.

- Disaster planning:
    - Working with the hospitality industry to assist tsunami preparedness without scaring people away
    - Supporting acquisition of and planning for emergency generators, post-disaster shelters, and food caches
    - Ensuring households and organizations have insurance and additional funds/resources to support themselves after a disaster
    - Developing community visions for rebuilding and/or relocating after a Cascadia earthquake event
    - Assessing evacuation routes for vulnerability to additional hazards, mitigating these hazards, and developing routes that are ADA-accessible and traversable in two-wheel drive vehicles)
    - Conducting local outreach about evacuation routes (e.g., DNR walk maps) to non-governmental audiences such as schools, tourists, and the general public
    - Convening conversations involving counties, state parks, citizens, emergency responders, and other groups to develop new and/or improved emergency response strategies or coordination

Methods for **incorporating process-based design and temporal dynamics into projects** include:

- Understanding the long-term trajectory of coastal landforms and incorporating this knowledge into project planning
- Using natural processes as a guide (such as designing projects to encourage existing sediment transport/deposition processes, rather than combating these processes)
- Applying adaptive management techniques that are informed by local participants' observations and insights where possible
- Furthering project maintenance and adaptive management by ensuring site access, planning for maintenance, and accessing funds for maintenance
- Consider differing needs of seasonal and year-round human populations
- Establishing ways to support populations both during and after catastrophic events, and, when possible, integrating these efforts into pre-event planning (e.g., developing caches at the end of evacuation routes, supporting a resilient food supply that functions after catastrophic events)

Strong outreach, engagement, and project communications can support:

- Community assessment of needs and priorities
- Formation of local groups, volunteer organizations, and networks that address issues beyond single projects
- Communities with overcoming resistance to change
- Buy-in of potential project partners (e.g., by clearly communicating local benefits)
- Coordination across joint efforts via a neutral party
- Individual/household preparedness
- Attendance and participation in other programs (e.g., Tsunami Roadshows)

- Normalizing preparedness and response to hazards (e.g., fire preparedness, Crescent City's "tsunami culture")
- Community/organizational access to resources and data, especially within low-capacity communities
- Connectivity between local organizations and agencies, when agencies are regularly connected at an institutional level

There is strong interest in supporting **multiple benefits within projects, either by fitting into existing projects that aren't hazards focused or by scoping hazards resilience projects to address other issues** such as:

- Infrastructure (e.g., water, food, electricity)
- housing production and affordability
- economic initiatives and job-training
- public health initiatives
- main street beautification and green infrastructure
- support for vulnerable populations (homeless and low-income communities, tourists)
- food security/sovereignty (pre- and post-disaster)
- engagement with youth and support for future generations
- telecommunications technology, wifi access, and emergency communications

Local jurisdictions, Tribes, special districts, and other organizations regularly stated the need for additional capacity within their organization in order to better support coastal hazards resilience. As communities access funds to address their needs, **resilience can be supported by ensuring that funds and assistance support local capacity. Agencies can support local capacity by:**

- **Project support beyond current local capacity**
    - Identifying and assisting the limited number of local project champions through regular check-ins, grant-writing assistance and project-specific support, and keeping projects on-task.
    - Direct project development support (e.g., assisting production of benefit-cost analyses for FEMA funding applications).
    - Work with communities whose morale has been affected by previous unsuccessful efforts
    - Advocate for innovative solutions, as jurisdictional employees may be limited in their ability to do so
    - Assistance with long-term planning
    - Technical support and assistance for work that is outside of a small city's day-to-day purview (e.g., addressing limited staffing available to administer and manage larger projects and higher-level planning; even when consultants are brought on board, it takes a non-trivial amount of time and effort to keep a project or planning exercise moving amidst competing priorities).
    - Long-term trust-building with communities, organizations, and Tribes with limited capacity and resources, which may entail community-based work that

isn't directly connected to hazards (though this work may be directly associated with community resilience, which contributes to hazards resilience)

- **Organizational development**
  - Supporting municipalities to be aware of, apply for, and manage grants
  - Advocacy for local organizations within and across agencies and elected officials.
  - Outreach and engagement for coastal organizations to raise awareness and recruit the next generation of members/leaders
  - Coast-wide coordination across county-based organizations (e.g. ,conservation districts, marine resources committees, and emergency managers)
  - Ensuring institutional knowledge is not lost as individuals retire or change positions.
  - Increasing technology access and knowledge of tools for remote meetings that would otherwise require time-intensive travel.
  - Accessing funds for increased staffing and incorporating prioritized staffing needs into hazards project scopes (e.g., unfunded education and water quality staff positions at Pacific and Grays Harbor Conservation Districts)

Collaboration and partnerships

Interviewees said that partnerships are critical to resilience. **Opportunities for agencies to assist coastal hazards resilience through collaboration and partnerships include:**

- **Integrating local and/or regional activities,** such as:
  - Supporting local committees to further hazards resilience efforts
  - Supporting interaction between diverse interested groups
  - Developing public–private partnerships that support hazards resilience (e.g., integrating vertical evacuation into new development or coordinating land use with timber companies)
  - Connecting separate projects occurring on adjacent land, both for improved results and cost-saving (e.g., shared infrastructure and equipment). Due to parcelization and other fragmentations of the landscape, shoreline systems and infrastructure may not share ownership or management.
  - Incorporating local communities' strengths into projects (e.g., engaging with rural communities' self-reliance)
  - Sharing lessons learned from existing projects, such as via the Coastal Hazards Risk Reduction Project Mapper[7]
  - Connecting related efforts across the coast to increase awareness of other activities and to foster collaboration without additional support
  - Networking between people with similar interests or goals
  - Sharing updates on projects through venues such as the Coastal Marine Resources Committee's (MRC) annual Coastal MRC Summit.
  - Partnerships with organizations not involved in hazards, in pursuit of multi-benefit projects

[7] https://waecy.maps.arcgis.com/apps/MapSeries/index.html?appid=cb81314d6fb44e0187e7980a1f0cd32b

- **Connecting local efforts and external opportunities**, such as:
    - Partnering with universities and colleges to scope opportunities
    - Supporting communication and application status updates between local jurisdictions and FEMA (via Washington State Emergency Management Division)
    - Outlining for local constituents which types of projects qualify for various funds
- **Building effective partnerships in order to harness support that local, state, Tribal, and federal partners can provide** (see below).

Local, state, Tribal, and federal entities provide the following types of assistance and services.

- Washington Sea Grant may be able to provide:
    - outreach and educational support,
    - technical support,
    - neutral facilitation or mediation,
    - economic data and connection to local and regional economic organizations.
- Washington State Department of Ecology may be able to provide:
    - technical review or additional support,
    - permitting support and explanations of regulatory maps,
    - workshop support through technical assistance,
    - state-level FEMA coordination,
    - support toward Floodplains by Design applications and grant management.
- Washington State Department of Natural Resources may be able to provide mapping and outreach for geologic hazards
- Washington State Emergency Management Division (EMD):
    - EMD may be able to provide support for vertical evacuation structures, evacuation routes, signage to prepare for catastrophic events, and mitigation grants to assist local priorities to be prepared for catastrophic events.
    - EMD is exploring private sources to fund vertical evacuation structures, potentially through providing support with matching funds, and is interested in identifying new paths toward funding.
    - EMD is working to prioritize funding for multi-benefit projects that build long-term community resilience.
    - EMD is working on a Tsunami Cache Guidebook to supplement the existing Manual for Tsunami Vertical Evacuation Structures (with Oregon Office of Emergency Management).
    - EMD is involved in development of a database to track mitigation projects' status.
- Washington State University's Division of Government Studies and Services may be able to support coastal hazards resilience through outreach, surveys, and associated analysis.
- Washington State University Extension may be able to provide a variety of assistance roles in each county.
- US Army Corps of Engineers may be able to provide rapid response in emergencies.
- US Department of Homeland Security may be able to support infrastructure planning.

- Lead Entities' interests may overlap with coastal hazards resilience efforts as they relate to:
    - tide gate removals/retrofits,
    - flooding and floodplain management,
    - water quality,
    - erosion and sediment management (e.g., developing sediment budgets and associated analyses),
    - in-stream and riparian habitat quality, such as large woody debris supply/ recruitment, large woody debris analysis, and access to off-channel habitat,
    - road relocation/redesign (which connects to evacuation routes and seismic retrofitting for bridges and roadways).
- Lower Columbia Solutions Group is interested in supporting sea level rise adaptation, especially for culverts.
- County emergency managers may be able to produce signage and outreach materials.
- Local jurisdictions, Tribes, and educational institutions may be able to lead regular events to support resilience (e.g., annual evacuation route walks).
- Local residents and facilitators may be able to provide personal expertise, local insights, and observations to inform project design or adaptive management.

Insights for successful collaborations include:

- Someone within the local organization or project effort should be the driver of action. Additional local partners (e.g., conservation districts, Tribes, fishermen) affected by the project are necessary for sharing institutional knowledge and local insights.
- Seek out working partnerships with local groups—to provide feedback and insights into local dynamics.
- Hold community workshops—to provide a strong starting point for project scoping/design. Hold multiple workshops throughout the project development process if possible.
- Hire local facilitators—to build trust and ensure relevant conversations, if funds are available.
- Proactively seek out and engage with local individual(s) who think big-picture about resilience or have broadened perspectives, such as community members who are engaged in multiple local activities, are extension agents, or are agency staff.
- Defining and organizing regular communication points within new partnership efforts will support collaboration among agencies and local communities and will strengthen collective understanding of how different organizations operate.
- Engage with agencies, Tribes, and other relevant authorities prior to project design and implementation. This applies to physical projects as well as outreach/education, in order to communicate clearly and in a coordinated fashion.
- Work with elected officials to build political support and accomplish tasks.
- Allow strategies to evolve as new information is acquired.
- Ensure expenses are planned and budgeted before the project begins.

- Recognize that the involvement of multiple stakeholders in the project development process, while important for building consensus and developing multi-benefit solutions, may lengthen communication or collaboration timelines.
- Learn from existing grant or project development programs, such as the Lead Entities' project submission process.

Funding

Many project proponents struggle to find funding. Additionally, the coast-wide need for tsunami preparedness is unlikely to be met fully by FEMA funds, so there is interest in finding additional funding sources for tsunami preparedness (e.g., vertical evacuation structures).

Primary coastal hazards resilience funding sources (many of which are discussed in Appendix A) include:

- Bureau of Indian Affairs (BIA) Resilience Planning Grants
- FEMA Building Resilient Infrastructure and Communities (BRIC) Program
- FEMA Cooperating Technical Partners (CTP) Program
- Floodplains by Design
- National Fish and Wildlife Foundation (NFWF) National Coastal Resilience Fund
- NOAA Effects of Sea Level Rise (ESLR) Program
- NOAA Environmental Literacy Program
- Washington Coast Restoration and Resilience Initiative (WCRRI)

Other opportunities to fund projects may not be directly related to coastal hazards projects, but apply to many of the issues described by interviewees. **Additional funding sources and strategies to support coastal hazards resilience efforts** include:

- Community Development Block Grant (CDBG) Program
- US Economic Development Administration grants
- Federal Highway Administration Transportation Improvement Program
- NFWS National Coastal Wetland Conservation grant program
- FEMA Hazard Mitigation Grant Program for critical facilities
- Bureau of Reclamation WaterSMART Water and Energy Efficiency Grants
- Land and Water Conservation Fund
- Local improvement districts
- Public–private partnerships
- Safe Routes to Schools funding, including other sustainability-focused funding streams and financing
- Small grants from local foundations
- Scaling down, scaling up, or merging projects to go after more accessible (smaller or larger) funding levels
- Eminent domain funds through the Stafford Act may be a more readily available tool for jurisdictions managing flood/tsunami risk, per recent federal policy changes
- including projects within hazard mitigation plans to better access FEMA funds

- Funding streams unrelated to hazards, but related to project goals (e.g., school relocation via Bureau of Indian Education)
- Developing plans to channel anticipated funds after a regional disaster declaration (e.g., after a Cascadia event)

Many jurisdictions struggle to find match funding in order to qualify for federal funding. **Opportunities to lower local match requirements** include:

- US Economic Development Administration grants (up to 80% match)
- BIA and CDBG funds, which may be able to serve as non-federal matching funds for FEMA funding
- WA State Disaster Account funding (can split FEMA match to 12.5%)
- "Small impoverished community" designation (reduces federal match requirements to 10% for programs such as FEMA BRIC)
- Including match allocation on local budgets
- Developing a Washington State allocation to supplement full or partial local match funds
- Staff working on projects can apply their time toward match (per specific funding sources' constraints)