WASHINGTON STATE UNIVERSITY

THE WILLIAM D. RUCKELSHAUS CENTER

UNIVERSITY OF WASHINGTON

Options and Considerations for Implementing the Coastal Hazards Organizational Resilience Team (COHORT)

Conducted by:

The William D. Ruckelshaus Center

June 30, 2019

WASHINGTON STATE UNIVERSITY

THE WILLIAM D. RUCKELSHAUS CENTER

UNIVERSITY OF WASHINGTON

The William D. Ruckelshaus Center is a neutral resource for collaborative problem solving in the State of Washington and the Pacific Northwest, dedicated to assisting public, private, tribal, non-profit, and other community leaders in their efforts to build consensus and resolve conflicts around difficult public policy issues. It is a joint effort of Washington State University, hosted and administered by WSU Extension and the University of Washington, hosted by the Daniel J. Evans School of Public Policy and Governance.

For more information visit www.ruckelshauscenter.wsu.edu

WILLIAM D. RUCKELSHAUS CENTER
901 Fifth Avenue, Suite 2900
Seattle, WA 98164-2040
-and-
Hulbert Hall, Room 121
Pullman, WA 99164-6248

Report Team Members:

Phyllis Shulman, Ruckelshaus Center Senior Facilitator, Special Projects, Washington State University Extension

Tye Ferrell, Principal, Resilience Collaborative NW

Amanda Murphy, Ruckelshaus Center Senior Project Lead, Assistant Professor, Washington State University Extension

WASHINGTON STATE UNIVERSITY EXTENSION

EVANS SCHOOL OF PUBLIC POLICY & GOVERNANCE
UNIVERSITY of WASHINGTON

Options and Considerations for Implementing the Coastal Hazards Organizational Resilience Team (COHORT)

Why Focus on Improving Coastal Resilience?

The Washington coast and coastal communities are an extraordinary confluence of cultures, unique ecosystems, influences, and threats. The coast is home to several tribes, is a gateway to iconic natural treasures, and the people are stewards of distinctive ecosystems that support shellfish growing, fishing, cranberry growing, and timber production. The area is also at the epicenter of potentially catastrophic impacts from a Cascadia earthquake and tsunami and is at the frontline of impacts from extreme weather, waves, and ocean changes. These threats are compounded by limited and changing economic opportunities, and emerging issues such as sea-level rise and ocean acidification.

A recent report found that in Grays Harbor alone, there are 332 buildings, worth $43.6 million in landslide hazard zones. Erosion threatens more than $275 million worth of residential buildings and community assets. Flood events are increasing in frequency and severity, both in and outside of FEMA's designated flood zones. A one-percent-annual-chance flood event, which is seen as increasingly like, could cause an estimated $160.8 million in direct damages to buildings and infrastructure, representing around $1.75 billion in total costs to the County. Finally, 15,000 buildings in the County are at risk in the event of a Cascadia subduction zone earthquake, representing approximately $1.9 billion in total building value.[1]

All along the coast individuals, communities, and tribes are striving to sustain their livelihoods, environment, and quality of life. Increasing their ability to thrive and be more resilient could have positive ramifications for the economic and environmental health of the state as a whole. Important and innovative efforts to increase resilience along the coast are already happening that could be instructive for others throughout the state and nation. Supporting, expanding, and deepening these efforts will have lasting benefits for generations. Resilience efforts on Washington's coast should serve as a valuable reference for the recently approved Washington State Natural Disaster and Resiliency Activities Work Group's (SSB 5106), as it seeks to identify best practices and develop recommendations.

A critical aspect of community resilience on Washington's outer coast is economic well-being. Median incomes on the coast are low relative to many other parts of the State, and unemployment rates are high. One community member called the economic decline on the coast a 'slow-moving tsunami.' While coastal hazards are important to address, it will be difficult for coastal communities and individuals to dedicate the necessary energy or investment into being proactive for the future when they are having a difficult time surviving in the present.

[1] Grays Harbor Resilience Coalition Project Report: https://fortress.wa.gov/ecy/publications/documents/1706018.pdf

The well-being of communities and the coastal natural environment are intimately linked. Increasing the resilience of coastal communities will require working at the intersection of economic prosperity, community health, ecology, emergency preparedness, infrastructure, and governance. This in turn will require multi-disciplinary approaches, creativity, and nimbleness as new partnerships are formed, joint strategies are developed, and collaboration is increased among governments, researchers, local communities, and other partners.

Importance of the Next Step: Develop and Fund a Coast-Wide Resilience Initiative to Enhance and Integrate Efforts

In 2016, coastal entities in Grays Harbor County, in partnership with the office of U.S. Representative Derek Kilmer's Office, and the Washington State Department of Ecology contracted with the William D. Ruckelshaus Center (the Center) to conduct an assessment that explores long-term resilience opportunities in response to growing concerns about the impact on coastal communities, infrastructure, and the natural environment from erosion, flooding, and landslides; the number and severity of storms; predictions about rising sea levels; and a potentially large earthquake and tsunami. For the purposes of the assessment, the coast was defined as the outer Pacific coast.

Through conducting 104 interviews and meetings with coastal tribes, coastal residents, elected officials, federal, tribal, state, county, and city government agency staff, researchers, scientists, engineers, NGOs, and other interested parties the *Washington State Coast Resilience Assessment Final Report*[2] *examined* the dynamics, interests, challenges, and opportunities related to coastal resilience in Washington State. The assessment provided a mechanism for the experiences and viewpoints of the participants to inform the next generation of strategies for enhancing coast-wide resilience. The assessment began to identify existing efforts so that new efforts build upon what is already established. It also identified approaches, processes, structures, and resources needed to enhance and support coast-wide resilience efforts.

While coastal communities have shown grit and self-reliance, increasing uncertainty poses a threat to lives, lands, and future livelihoods. Many coastal communities are struggling economically as the natural resource base on which they depend has changed or declined. Wild salmon runs, for example, have declined dramatically over the past 50 years, impacting a wide range of coastal jobs. New approaches to the growing challenges are needed that connect the wisdom and experience of those living on the coast with the expertise of governments, nonprofits, and academics. The relative lack of resources on the coast requires new funding partnerships and opportunities for local revenue generation.

[2] *Washington State Coast Resilience Assessment Final Report,* https://s3.wp.wsu.edu/uploads/sites/2180/2013/06/Washington-Coast-Resilience-Assessment-Report_Final_5.1.17.pdf

For coastal communities to thrive into the future, they require the capacity to apply novel local approaches and partnerships that address the complexity and unique attributes of each community and its surrounding ecology. They will also need to strengthen their capabilities for adaptation to changing conditions. Improving resilience will require a commitment to the ecological, economic, and social health of the coast and the recognition that the health of the coast is an important component of the well-being of the whole State.

There have been a number of uncoordinated efforts to address resilience along the coast. Participants in the assessment highlighted the need to collaboratively develop strategic priorities, reduce competition among jurisdictions, and create a long-term sustained effort to increase the capacity of coastal communities to address resilience, not just respond to disasters after they occur. Participants expressed interest in a more integrated way of addressing coastal issues, acknowledging that individual projects have impacts along the whole coast. They want to minimize the possibility that solving problems in one area of the coast might negatively impact another. They recognized the need for the development of creative funding strategies and the need to utilize the knowledge within multiple agencies to identify and weave together potential sources of funding.

Developing a coast-wide resilience initiative can help to address the limited capacity of communities along the coast to develop and implement projects that improve resilience. By being proactive, communities and the State can reduce exposure, risk, and cost compared to the cost of damages once a disaster has occurred. Integration of effort will also increase the cost effectiveness of projects.

The COHORT effort is building on the experiences and lessons learned from past efforts, most notably the Southwest Coast Erosion Task Force and the Flood Hazard Reduction Projects and Agency Coordination (funded by SB 3110 in 1998). Experience gained from these previous efforts should make this effort more durable and effective. The support from and collaboration among multiple agencies; the State support for a community-led initiative; and the fact that this effort is envisioned from the outset as a long-term initiative sets it apart.

The Need for the COHORT

In March 2018, Governor Jay Inslee requested the assistance of the Washington Coastal Marine Advisory Council (WCMAC) to prioritize needs and actions to carry out the recommendations in the *Washington State Coast Resilience Assessment Final Report.*

After a year of discussion and investigation, the WCMAC decided that a priority should be placed on implementing the recommendation to "Establish a Coast-Wide Resilience Initiative to Enhance and Integrate Efforts." According to the Center's Assessment Report:

> *A coast-wide approach would elevate existing resilience efforts, mobilize new efforts, and weave together local initiatives while providing a systems approach*

to issues, risk analysis, project evaluation, and shared strategy development. The initiative could be developed in a way that builds on the efforts and leadership of coastal tribes, Conservation Districts, government agencies, existing organizations, communities, groups, and individuals while also providing a vehicle to bridge government, non-governmental, and academic analysis and research.

To best address this need, the Center's report highlighted that there needs to be a core group of entities who would partner together as integrators, provide backbone services, and work as a team to address resilience issues coast-wide. The Center recommended the formation of a "Coastal Hazards Organizational Resilience Team" (COHORT):

Create an integrated coast-wide effort to strengthen coastal resilience that is staffed by Washington Sea Grant, Washington State University Extension, Washington State Department of Ecology, and Washington State Emergency Management Division. There are significant capacity constraints at the local level. The small numbers of local government staff do not allow for additional planning efforts that could improve local conditions and better prepare the community for future events. Likewise, universities and agencies often have limited resources or ability to collaborate effectively with local communities. Parties involved in coastal resilience efforts would benefit from uniting around a common definition and vision of resilience. A coast-wide approach would elevate existing resilience efforts, mobilize new efforts, and weave together local initiatives while providing a systems approach to issues, risk analysis, project evaluation, and shared strategy development. The initiative could be developed in a way that builds on the efforts and leadership of coastal tribes, Conservation Districts, government agencies, existing organizations, communities, group, and individuals while also providing a vehicle to bridge government, non-governmental, and academic analysis and research. To support the initiative there needs to be a core group of people who partner together as integrators, provide backbone services, and work as a team in addressing resilience issues coast-wide… The COHORT would establish a formal partnership that would assist in aligning key resources and expertise, spearheading cross-fertilization of ideas, enhancing collaboration, and coordinating strategic investment in projects and programs.

The COHORT will assist coastal communities in prioritizing coast-wide projects in a coordinated way and accessing funding, including federal dollars. Changes to federal disaster mitigation funding guidelines will likely increase the amount of money available for predesign and planning and this effort will give communities a leg up in applying and

making the case for those funds.[3] The COHORT can help communities develop project priorities in a coordinated way that can improve opportunities for funding.

Through developing joint priorities, strategies, and projects the COHORT can help communities to develop an integrated approach that minimizes projects competing with one another for resources, provides overall strategies and a vision for long-term resilience, identifies public benefits of projects, and assists funders with evaluating project needs. A long-term strategy can create consistency with land-use practices and mitigation best practices.

The increase in capital investments anticipated from the COHORT's work would help to reduce risk and mitigate the damage from hazard events. A focus on achieving multiple benefits from these investments will also help to ensure that they benefit local economies and create local jobs. The best time to build resilient communities is before the disaster happens, not after. A recent study by the National Institute of Building Sciences found that mitigation can provide a $7 benefit for each $1 invested. (see *Appendix C*).

The make-up of the COHORT was based upon the findings in the report that identified that these 4 entities have the interest, expertise, mission, and capacity to provide integration and elevation of coastal resilience efforts.

Coastal communities are asking for more proactive and collective investment to reduce and respond to risk. The COHORT concept emerged as a key recommendation of the Center's assessment. It responds directly to the needs expressed by coastal communities for additional capacity, increased funding, and improved access to information. They expressed the need for data collection and analysis at a scale that is useful for characterizing problems and developing and evaluating alternative options and solutions. It places emphasis on place-based support to help communities generate resilience strategies and projects that carry out coast-wide priorities in ways that address local concerns, such as increasing local economic development and creating jobs.

By funding projects and plans conceived and supported by local interests, local knowledge can be utilized. This can lead to the implementation of tailored solutions that address the complex interactions between the physical, economic, and social conditions of each unique stretch of shoreline along our coast. This effort will pay dividends in terms of mitigating or avoiding

[3] Changes to the federal Pre-Disaster Mitigation (PDM) grant program made through the Disaster Recovery Reform Act of 2018 (DRRA) are shifting the focus of federal disaster investments and increasing funding for mitigation. PDM jumped from approximately $90 million in 2016 and 2017 to around $235 million in 2018, and those figures are expected to continue climbing (See https://www.pewtrusts.org/en/research-and-analysis/articles/2018/10/03/with-costly-floods-on-the-rise-congress-passes-bill-to-help-communities-prepare) However, these funding pots are still limited, pitting Washington's applicants against one another for grant dollars in a zero-sum game. Complicating the implications of the competitive nature of these programs, there are also significant limitations on applicants' ability to quantify the secondary benefits of projects that go beyond direct risk-reduction, thereby reducing the assessed "value" of the kinds of multi-benefit projects that could also provide economic stimulus, recreation, ecosystem, and/or other benefits.

damage to communities, infrastructure, lives, and livelihoods in the future in the event of an emergency and over time as climate impacts increase. The work of the COHORT in collaboration with coastal communities can also help inform the work of the new Statewide Resilience Initiative signed into law (SB 5016) and can provide a model for regional collaboration for other areas of the State.

In short, the goal of the COHORT is to strengthen the resilience efforts of coastal communities by delivering additional state investment to align local resources and expertise, spearhead cross-fertilization of ideas, enhance collaboration, and coordinate strategic investment in science, projects, and programs. The COHORT will act as integrators to support local leadership.

Some of the long-term illustrative outputs and outcomes that are anticipated from the COHORT's work with coastal communities and entities include:

- Increase in focus on addressing natural hazards;
- Development of a shared understanding of resilience for the outer coast;
- Development of a strategic plan to guide overall coastal resilience efforts and create a unified vision for these efforts among coastal communities and entities, as well as annual work programs based on the plan;
- Increased funding for critical infrastructure, risk reduction, economic development, and other resilience projects from a variety of sources;
- A coast-wide risk assessment and risk reduction analysis that identifies priority actions and projects;
- Increased access to the best available science to support planning and project prioritization;
- Support in seeking and writing grant submissions and in grant and contract administration;
- Improved storytelling and communication to decision-makers and others about what the coastal communities are experiencing and what is need to increase their resilience.
- Enhanced access to data and practical information for coastal communities on emergency preparedness, resilience planning, policymaking, outreach, and project development; and
- Cultivation of the next generation of community leaders on the coast.

Quotes from WCMAC members when asked to describe the rationale and value of establishing the COHORT are stated in *Appendix B.*

The Process for Development of Options

WCMAC engaged the Center to explore potential models for organizational structure, engagement with WCMAC and potential COHORT partners, and organizational design and development of options and recommendations for the practical establishment of a COHORT. Overarching considerations explored during the research process included:

- Goals, purpose, and mission of the COHORT;
- The definition of resilience and how it relates to the goals, mission, and purpose;
- Opportunities for leveraging existing assets and resources;
- Organizational structure, governance, and alignment with existing structures; and options, and tradeoffs.

The tasks for the exploration included:

Task 1. Information Gathering

- Looking into potential organizational models and lessons learned from similar initiatives that could be applied to the COHORT.
- Developing a list of key issues and organizational elements that would need to be addressed in the development of the COHORT.
- Soliciting initial input from the WCMAC, the WCMAC Resilience Sub-Committee, and potential agency and university partners.

Task 2. Organizational Design and Options

- Working with WCMAC and potential agency and university partners to address implementation issues and organizational design options for the establishment of the COHORT model.

Task 3. Documentation and Facilitation of Exploration of Options

- Documenting options, implementation considerations, and identifying recommendations for implementation.
- Facilitating discussion on next steps for implementation.

Guiding Principles for Consideration of Options

The following key principles emerged from the interviews conducted by the Ruckelshaus Assessment Team. They were developed for use by decision-makers at all levels to guide the development of coastal resilience efforts. These principles informed the recommendations in the assessment and were used in considering options for the development of the COHORT.

- Start with place: understand, honor, and support the unique ecology, culture, social dynamics, and history of each place, acknowledging that the coast is not homogenous.
- Supplement needs-based approaches with a focus on community assets.
- Acknowledge, map, and leverage assets whenever possible.
- Support the agency and self-efficacy of coastal communities by building on locally-driven efforts, encouraging local innovation and connectivity, and maximizing the potential for local people to carry out and sustain resilience efforts.
- Recognize the time and resource constraints of small communities, local governments, and tribes.

- Prioritize actions that improve life safety and address basic needs.
- Use a systems approach when identifying, planning, designing, and evaluating efforts. This includes:
    - Using longer-term planning horizons;
    - Identifying interconnections;
    - Considering patterns, trends and changing conditions;
    - Challenging individual and group assumptions;
    - Not being bound by how things were approached in the past;
    - Breaking down silos and working across disciplinary and sectorial boundaries;
    - Addressing multiple objectives whenever possible; and
    - Taking into account the multiple impacts of an effort.
- Design and, in some cases, require infrastructure projects to provide multiple benefits.
- Incorporate the support and diversification of local coastal economies as a key element in planning and project design.
- Increase opportunities for coordination of effort, learning, cross-fertilization, and trust building among all involved parties.
- Support and expand the work of existing groups instead of only creating new groups.
- Identify and implement modest "wins" to create momentum and build a sense of collective self-efficacy.
- Minimize bureaucracy and unnecessary barriers.
- Broaden engagement to include low-income and minority residents.
- Look for opportunities to address gaps in communication and coordination among tribal, federal, state, and local entities.

Findings from Information Gathering: Exploration of Other Models

In order to inform the structure of the COHORT and how it would best function, the Center investigated several efforts that had similar objectives. Specifically, the Center looked at efforts around the country and in the Pacific Northwest that are trying to address the same kind of broad, long-term, systems change necessary for the success of the COHORT and Coastal Resilience Initiative. The Center looked at several efforts, ranging from grassroots initiatives that have coalesced into broader efforts, to larger, intergovernmental collaborations.

This information gathering process also included discussions with Washington State University Extension, Washington Sea Grant, Washington State Department of Ecology, and Washington Military Department Emergency Management Division staff. The findings, found in *Appendix A*, discuss some of the efforts that the team looked into, as well as a few of the broader lessons learned that may be applicable to the COHORT, either as it is created or in the future as it evolves.

<u>Collective Impact</u>
All of the efforts the Center looked at resemble or are consciously structured as collective impact initiatives. The term collective impact was coined in 2009, but the basic idea has been

around longer. Collective impact refers to a specific organizational approach to implementing large-scale community or regional change that addresses complex, systemic issues. Collective impact does this by bringing the many actors together who are engaged on addressing the issue or issues at hand in a structured way in order to promote long-term transformational change. The five elements of a collective impact initiative are:

1. A **common agenda** is agreed on. Organizations come together to collectively define the problem and create a shared vision to solve it.
2. **Shared measurement** is established. Participants agree to track progress in the same way, which allows for continuous improvement.
3. **Mutually reinforcing activities** are fostered. Collective efforts are coordinated to increase the impact.
4. **Continuous communication** is a priority. This helps to build trust and relationships among all participants.
5. The effort has a **strong backbone**. The backbone is a team dedicated to orchestrating the work of the collective.

In discussions with different organizations as part of the COHORT inquiry, key aspects of the collective impact model were cited as critical for the success of existing efforts, particularly:

- A strong backbone;
- A clear understanding of the vision and mission of the initiative; and
- Clear and continuous communication within the initiative among its various members.

All of the collective impact elements, however, are likely to be important elements of success for the Coastal Resilience Initiative.

Options for Establishment of the COHORT

The following options for the establishment of the COHORT were developed through conversations with WCMAC, WCMAC Resilience Subcommittee, and staff from the potential COHORT agencies. The feedback was distilled and synthesized to develop the following proposal and options for consideration.

The **overall goal** of the COHORT is to strengthen the resilience efforts of coastal communities by delivering additional state investment to align local resources and expertise, spearhead cross-fertilization of ideas, enhance collaboration, and coordinate strategic investment in projects and programs. The COHORT will act as integrators to support local leadership.

Overall Proposal

1. **Establish and fund the foundation of an integrated coast-wide effort to strengthen coastal resilience through funding the operational costs of a Coastal Hazards Organizational Resilience Team (COHORT), a formal partnership staffed by Washington Sea Grant, Washington State University Extension, Washington State Department of Ecology, and Washington State Emergency Management Division. Provide initial funding for a minimum of 5 years.**
2. **Provide initial funding for priority resilience projects identified by the coastal communities.**

The ability to provide seed funding and/or matching funding to local governments, nonprofits, tribes, or other entities to support their work on the resilience priorities of coastal communities is important for furthering the objectives of the Coastal Resilience Initiative.

Funding for the COHORT could come as a request for operational and capital funds from the WCMAC and other coastal entity/ies to the Governor's Office in 2019, for funding in 2020. The request could be championed by WCMAC in partnership with a wide range of coastal entities who could sign on to show their support.

In the interim, the Department of Ecology received a $247,000 grant to implement "A Coast-Wide Approach to Implementing Community Resilience Recommendations to Shoreline Natural Hazards" from the National Oceanic and Atmospheric Administration this year. The grant is being implemented by Sea Grant and will support coastal communities in coming to agreement about project priorities, achieving new successes to bolster their case, and in solidifying the rationale for a COHORT.

Mission and Functions of the COHORT

Assumption:
The structure of the COHORT and the coast-wide resilience initiative should grow out of the COHORT's function and should be designed in a way that it can grow and evolve to meet changing needs, functions, and funding. It will establish shared goals and measurable outcomes toward achieving coast-wide resilience.

<u>Mission</u>
The Mission of the COHORT is to help create and support an integrated coast-wide effort to strengthen the social, economic, and ecological resilience of communities on the outer coast of Washington. The COHORT will act as integrators to support local leadership. The effort would:

- Have a strong focus on addressing natural hazards;
- Elevate and integrate the existing resilience efforts and leadership of coastal tribes, Conservation Districts, government agencies, existing organizations, communities, group, and individuals; mobilizing new efforts; and weaving together local initiatives;
- Mobilize new efforts;
- Bridge government, nonprofit, and academic analysis and research; and

- Use a systems approach to issues, risk analysis, project evaluation, and shared strategy development.

Functions

To support the Initiative in achieving this, the COHORT will provide the following functions:

- Provide backbone services, and work as a team to address resilience issues coast-wide. Backbone services include:
    - Orchestrate the activities of the various coastal entities engaged in resilience activities;
    - Convene these various entities as necessary;
    - Facilitate meetings;
    - Coordinate internal and external communications; and
    - Support the leveraging of funds for additional projects.
- Develop a shared concept of resilience and work collaboratively with existing entities to develop coast-wide strategies for resilience.
- Establish an annual work program.
- Align key resources and expertise, spearhead cross-fertilization of ideas, enhance collaboration, and coordinate strategic investment in projects and programs.
- Assist with a coast-wide risk assessment and risk reduction analysis in coordination with existing groups (e.g. Department of Natural Resources, The Nature Conservancy, WCMAC, WECAN, MRCs) to identify priority actions and projects.
- Bring the best available science to communities by developing a joint research agenda to inform project and policy development, as well as developing a system for tracking findings that are accessible to and in formats that are useful and comprehensible to communities and local governments.
- Administer seed funding and help communities pursue resilience activities through planning, preliminary design, site assessment, final design, data collection, and permitting, as well as monitoring (monitoring is important for adaptive management, testing innovative approaches, and sharing lessons learned among communities).
- Help MRCs, coastal governments, and other coastal entities to develop and write new grant proposals. Proactively coordinate with government officials, nonprofits and foundations to identify funding opportunities and opportunities for collaboration that can enhance the likelihood of securing grants.
- Support grant and contract administration.
- Encourage cross-sector collaboration among government agencies, researchers, and communities.
- Capture success stories and communicate to decision-makers what the coast and coastal communities need to increase their resilience.
- Identify and coordinate opportunities to enhance access to data and practical information for coastal communities on emergency preparedness, resilience planning, policymaking, outreach, and project development, building on resources such as the Washington Coastal Hazards Resilience Network.

- Increase outreach about community and coastal resilience and emergency preparedness efforts.
- Support cultivation of the next generation of community leaders on the coast and tap into the existing network of young people who have left the coast, but remain interested in making a positive contribution or returning to take on leadership roles.

Organizational Structure

Core Members of the COHORT

- Composed of four Washington State agencies—Washington Sea Grant, Washington State University Extension, Washington State Department of Ecology, and Washington State Emergency Management Division.
- Another option is to add Washington State Department of Commerce or other agency as a proposed COHORT member, assuming the agency is willing and able to participate, either at the inception of the COHORT or at a later date.
- Each agency hires one staff person.
- A half or full-time operations coordinator is hired to handle logistics, basic communications, office finances, and essential administrative duties. This could also be achieved through a position share with an existing position or through fellowships.
- When additional expertise is needed, the COHORT staff and their supporting agencies will work collaboratively with other State agencies, such as the Department of Commerce, to support community objectives.

Establishment

There are three primary options for establishing the COHORT. Note that any of these options could be modified. For example, in Option 2, agencies could change priorities internally and dedicate staff, if available, without additional funding. This would entail difficult tradeoffs among each agency's priorities. Because of this, the commitments may not necessarily be durable, although it is possible that they could be. A key element to the success of the COHORT is that it shifts from piecemeal efforts to a more comprehensive approach; therefore, it will be important to initiate the establishment of the COHORT with all staff positions in place.

- The first option is essentially to remain with the status quo, where the COHORT is seen as a priority by participating agencies, but no official commitment is made at the State level. Each agency would determine how it could best fulfill its commitments to the effort and COHORT positions may or may not be full time. This option would not come with dedicated project funding and the durability of the arrangement is unclear.
- The second option would entail an interagency agreement or agreements, such as a Memorandum of Understanding or Agreement. The agreement(s) would recognize the importance of the effort and outline the specific commitments of each agency. Dedicated funding would be committed by the State Legislature for full-time staff, as well as possible project funding. Possible grant funding could supplement or replace

some of the State funding. This option would require the commitment of key stakeholders in coastal communities, participating agencies, the Governor's Office, and the State Legislature.

- The third option is the most formal. The COHORT would be officially authorized by the State Legislature and dedicated funding would be committed for staff, as well as possible project funding. This option would entail the most upfront work and require the commitment of key stakeholders in coastal communities, participating agencies, the Governor's Office, and the State Legislature. It would also require the proposal and passage of legislation authorizing the activity and any funding. It would bind each agency to the effort and provide committed full-time staff to the effort over whatever period specified in the legislation, if any.

<u>COHORT Charter</u>

- Develop a charter to guide the work of the COHORT and to establish its intent with the member agencies. The charter would lay out the COHORT's purpose, mission, and roles and responsibilities.
- The charter would incorporate the "Guiding Principles" stated in the Ruckelshaus Center Assessment.

<u>Administration and Management</u>

- Develop formal interagency agreements or MOUs/MOAs between all participating agencies. The agreement would bind all agencies to the partnership, would define the roles and responsibilities of the participating agencies and their staffs, would set out principles for coordination, collaboration, and communication, identify fiscal responsibilities, and set up internal management structures.
- Identify an administrative lead agency. The administrative lead agency would be responsible for managing the core administrative functions of the office. This would include, at a minimum, managing any pooled and shared administrative funds; paying rent or other shared bills; procuring any shared equipment or supplies; providing administrative support to the COHORT staff, if needed; and developing and administering the COHORT's internal budget. The lead agency would also house and maintain the website and provide IT support.
    - Funding for positions would include salaries, benefits, operational needs (computer, office furniture, office supplies, etc.). Indirect costs for the lead administrative agency would also need to be included.
    - Financial management could be established as part of the administrative lead agency's responsibilities. Through an interagency agreement the administrative lead agency could distribute operational funds and capital funds. Or each agency is designated in budget and receives funding directly.

<u>Additional option:</u> Establish an overall lead agency. An overall lead agency could be established to liaise with elected officials, be a final arbitrator, or other roles.

Project Implementation and Funds Management

- Funds managed by either one COHORT agency or by the Lead Administrative Agency, depending on the source of the funds
- If initial project funding was provided, funds could be distributed through the MRCs or through an application process, WCMAC or a newly established community advisory group could develop selection criteria and evaluate project proposals
- COHORT staff would not be direct project managers for capital projects.
- COHORT staff can develop partnerships with other entities to assemble project funding and can monitor other opportunities for project funding.

Intra-agency Coordination

In order to support field staff and ensure that agency support is developed and maintained for the work of the COHORT, each agency would:

- Assign a designed unit manager or supervisor in each agency to each COHORT member to support the COHORT member operationally. The details of this responsibility will need to be clearly spelled out in the supervisor's job description. These supervisors should meet regularly to coordinate.
- Assign an intra-agency lead, who is a higher-level manager, to provide leadership, conflict resolution, integration, and communication within the agency to support the COHORT politically.

Inter-agency Coordination

- Develop an inter-agency leadership team, composed of the intra-agency leads to support the COHORT partnership objectives, resolve conflicts, and provide guidance. The leadership team should meet on a quarterly basis initially. COHORT supervisors should also be included in these meetings as appropriate, to ensure their buy-in to the broader vision and support of the COHORT's efforts, as well as to keep them in the loop on related policy and program discussions.

Partnerships

- In the future, it could be helpful to create a separate nonprofit and/or foundation structure that could solicit private donations and support ongoing costs.

Location of the COHORT

- Co-locate the 5 positions, probably in Aberdeen and possibly at Grays Harbor College, which could enable learning opportunities for students and engagement of the next generation of coastal leaders on issues of resilience.
- Existing entities with offices on the coast could also potentially provide drop-in field offices. (WSU Extension has offices in every county. There are also other State offices throughout the coast.).
- In addition to having specific subject matter expertise, COHORT staff could each serve as a liaison with a specific region of the Coast, to develop deeper relationships.

Communications:

- Each COHORT agency will utilize the communications resources of their individual agencies to contribute to the overall communications needs of the COHORT.
- The COHORT will develop communication strategies focused on key target audiences laying out:
    - How COHORT members will communicate with each other, including use of individual emails;
    - How consistent messaging will happen within participating agencies about the COHORT when the COHORT is created, as well as over time, to ensure that agency support and alignment continues;
    - How storytelling about the issues facing coastal communities and their successes will happen and who the audiences will be;
    - Website design and implementation;
    - Communications with other agencies;
    - How to tap into university resources, including students focused on communications;
    - Communications to coastal communities and organizations; and
    - How best to share community and COHORT successes and lessons learned.

Overall Community Advisory Structure/Oversight of COHORT

- The WCMAC will initially provide the primary community advisory structure for the COHORT.
- The COHORT will seek guidance from tribes on how best they would like to be engaged in advising the COHORT.
- The COHORT will seek guidance, as appropriate, from MRCs, elected officials, local jurisdictions, Councils of Government, regional planning bodies, relevant regional efforts, and a diversity of community interests.
- Oversight will be provided through the COHORT agencies, as well as the Governor's Office, through WCMAC. In addition, participating agencies will report on progress to the legislature.

Considerations for Responsibilities of COHORT Positions

- A core function of the positions is being an integrator and facilitator for community interests and community empowerment. Community engagement will be an essential skill.
- Each position would also bring agency and subject matter expertise, for example: WSU Extension: Community and Economic Development, Community Resilience, Agricultural Production, Natural Resources, and Family and Home.

Emergency Management: Emergency Preparedness, Planning, Mitigation, Recovery, Data Acquisition, and Risk Analysis.
Washington Sea Grant: Community Outreach, Fisheries and Aquaculture, Marine and Coastal Planning, and Natural Hazards, Resilience, Community and Economic Development, and Climate Change.
Department of Ecology: Marine and Coastal Planning, Ecological Restoration, Policy, Data Acquisition, Risk Management, and Permitting and Regulations.

Political Advocacy

- Advocacy for coastal communities will be a critical element of a successful Coastal Resilience Initiative. Because COHORT staff will be State employees, however, any political advocacy efforts will need to come from other coastal entities. Key aspects of the COHORT's work can help to support these efforts, including data collection, research, communications and storytelling, and convening of coastal entities.

Considerations

Political Will

- The political will for creation and funding of the COHORT needs to come from coastal communities.

Governance

- *Does this establishment of the COHORT need to be incorporated into the Revised Code of Washington or otherwise enshrined in law? If so, what is the process?*

Structure, including Administration, Management, and Funding

- The structure should grow out of the function and should be designed in a way that it can grow and evolve to meet change needs, functions, and funding.
- The administrative structure should be as simple as possible, but a clear structure will be needed in order to request funding and spend it.

Interagency Coordination

- Ensuring that there is a sustained and focused effort will require focus not just from the COHORT team and the governance structure for the effort, but also support from each of the agencies at both a programmatic level, helping COHORT members to deal with issues within their own agencies, and at an executive level, keeping the institutions bound together, holding the vision, and supporting the initiative and COHORT.

Appendix A

Findings about similar efforts

Many efforts similar to the Coastal Resilience Initiative began as grassroots efforts and were scaled up to a regional level and formalized over time, for example, the Sustainable Southeast (Alaska) Partnership, Emerald Edge, Yakima Basin, and other projects.

Other efforts, such as the one that became the **Office of the Chehalis Basin**, started off as a response to an event, in this case, major flooding that closed I-5 for days. The original group was initially charged with the task of controlling flooding, but was not focused on larger issues, such as fish and agriculture.

- In 2014, the Governor's Office created a Governor's Work Group, which eventually became the Chehalis Board. It was composed of six (eventually seven) community members. Two area tribes were also represented. The new group was still charged with addressing flooding, but in addition, also addressing fish.
- The Chehalis Basin Strategy is a collection of potential actions and annual work plans. A programmatic environmental impact statement, completed in 2017, helped to assess the potential of the group's major proposals. The strategy is very project oriented.
- Five State agencies—DOE, Department of Natural Resources (DNR), Conservation Commission, Department of Transportation (WSDOT), and Department of Fish and Wildlife (DFW)—have non-voting membership on the Chehalis Board.
- The Office of the Chehalis Basin, created last year, administers the funds and oversees project implementation.
- The group has enjoyed a lot of interest and support from the Governor's Office, which also required them to work collaboratively to prioritize projects and request funding. They have been very successful in obtaining State funding, but so far not federal funding. Funding started as a direct appropriation from the Governor's Office, before shifting to DOE.
- This year's budget request of the legislature is for $74M, $73M of which is capital funding. Capital funds also support work by DFW and the tribes, such as studies and designs.
- The Chehalis Basin Board is responsible for "oversight of a long-term strategy resulting from the department's programmatic environmental impact statement for the Chehalis river basin to reduce flood damages and restore aquatic species habitat" and "for overseeing the implementation of the strategy and developing biennial and supplemental budget recommendations to the governor." (RCW 43.21A.731) Board meetings are open to the public and people attend regularly to give input.

The Coastal Resilience Initiative has interesting parallels with the **Climate Preparedness collaboratives** that the Institute for Sustainable Communities has helped to create around the country. Each collaborative has its own organizational structure, but with variations on the collective impact model. They engage on activities such as:

- Facilitated processes designed to deliver services;
- Peer learning opportunities;
- Capacity building and training;
- Commissioning of scientific studies or information projects to inform the policy process;
- Fundraising, pooling of resources, and collaboration in pursuit of funds; and
- Public policy advocacy at the state and federal levels.

Some of their learning includes:

- Ongoing funding is a challenge; it's long, slow work, but the results can be transformational (the Kresge Foundation funded a lot of the initial work with the South Florida collaborative, but then started pulling back);
- Coordinated and layered messaging is critical; it should focus at local levels as well as at higher levels so that the public is engaged;
- Their backbone organizations include regional planning commissions, university-based teams, and outside organizations; the overall coordination and administrative duties are critical to success; and
- If some participants (or the COHORT, in this case) are unable to advocate for policy positions at the state level, it is important to develop mechanisms to enable advocacy through, for example, local governments, nonprofits, or others in the community.

ISC offered support to the Coastal Resilience Initiative with case study literature and access to peer learning forums. ISC provides a staff person to support functions each collaborative needs, such as governance, public outreach, policy support, and help with finding additional resources. Their Urban Resilience Director offered to talk with the WCMAC about the work of the collaboratives, if desired.

The **Sustainable Southeast Partnership (SSP)**, based in Southeast Alaska, also has interesting parallels with the proposed Coastal Resilience Initiative. It has been operating now for 10 years. Its goal is economic, cultural, and ecological prosperity for their communities and region. Its focus areas are Natural Resource Stewardship, Energy Independence, Food Sustainability, and Economic Self-reliance. It has a deeply grassroots focus, in which communities determine the work that needs to be done.

Three conservationists who realized that their approaches were not working formed the Partnership. They wanted to change how communities and organizations work together at a regional level, as well as change how people think about issues of resource conservation and local economic development. The backbone of the organization is led by two organizations, Spruce Root, which takes the overall lead on oversight, administration, and convening of the partnership, and the Alaska Conservation Fund, a nonprofit statewide community foundation that manages the funding and grant making to partners. The initial $6M in funding, provided by three private foundations, is running out. The partnership is now looking to shift its funding model toward one that is funded more by members, who are now ready to step up.

The partnership backbone is staffed through part-time staff support from Spruce Root for a Program Director, as well as a fund/grant manager from the Alaska Conservation Fund. The partnership has one full-time staff person, who is a fundraiser. They also have a dedicated communications person, whose time is provided by a network member.

The SSP was designed to bring together federal, state, regional, and local governments, as well as nonprofits, businesses, and tribal corporations and tribal governments in common purpose. Initially, it began by matching funding for staff in local communities and organizations (nonprofit, local government, tribal government) at a 70 percent level. Communities and organizations had to pay the rest. The staff are known as "catalysts" and they play a catalytic role in their communities. The receiving communities and organizations had to commit their new catalyst to attendance at monthly videoconference meetings and two in-person partnership meetings a year.

Today, the partnership is growing, as organizations and communities recognize its value and ask to be included. The partnership has transformed the way that communities and organizations work together around resource conservation and local economic development. A consultant study recently estimated it is returning $7 for every dollar invested.[4]

Their lessons learned:

- Working on complex systems change requires time, dedication, and the building of the relationships, understanding, and capacity necessary to do the work. Understanding systems and how to make systems change was at first very difficult for people. Building relationships and trust has been central to their work.
- The collective impact model is an investment and it takes time. They had to invest in the catalysts, who ensure that the partnership is supporting the work in the community/organization and that the community/organization is connected to the partnership.
- A focus on storytelling has been instrumental in both telling the story of the partnership and recognizing communities for the work that they are doing, which further motivates and inspires community members.
- Measurement of progress has been difficult, because the work is less focused on projects and more on the building of relationships and trust, out of which the projects emerge. That is why they focus more on storytelling and return on investment. Levels of connectedness and commitment have consequently become important indicators of success.
- State and federal agency participation in the partnership can be problematic because of how they operate. They are great to work with, but their resources and people can disappear when administrations and priorities change. Because of this, the SSP roots its

[4] See SSP's qualitative Impact Evaluation Summary at http://sustainablesoutheast.net/wp-content/uploads/2019/01/SSP-Eval-Infostract-4.8.pdf and their Benefit Mapping at http://sustainablesoutheast.net/wp-content/uploads/2019/01/Benefit-Mapping-2.pdf.

work in communities and invites agencies to participate when other stakeholders have aligned on priorities.

- A visionary leader with a clear vision of the overall partnership and the process to get there is needed. In addition to an overall leader, the SSP also has regional catalysts who are experts in one of the four focus areas and sustain momentum.
- Millennials have become the driving force in the partnership. They are quick to join and to participate.
- Focusing initially on one project can help to rally energies and attention. It is also a way to model how the work will happen and how it will benefit communities. An opportunity to use storytelling for change.
- Focus time and resources on the people who show up to do the work and where there is energy to move forward.
- Trying to solve the community's problems for them is not effective. It's more effective to integrate into the community. Start with small wins. Sit with what is happening, not what you think should be happening. People may not initially have the capacity to engage, but by building trust and relationships over time and helping people solve immediate obstacles, the work will get done.
- Diversity of participation is critical. Be sure that everyone is at the table.

Additional Lessons Learned from Other Efforts

- Building relationships and trust to create a regional community is important and takes time. Facilitated dialogue helps. It can take time to rebuild trust when long-time participants leave, and new ones come on board.
- It's critical to have drivers and leaders of the effort who are outside of state agencies. People from the community need to be leading, guiding, and pushing the effort. This should include elected officials, but they may not necessarily be the people who have the clout and influence in their community.
- Setting up the right governance structure initially is important, to ensure that the right people are at the table to move things forward.
- High-level political will and engagement is critical. Who are the key leaders who can bring their significant influence to bear and encourage the right structure for getting things done?
- The vision and mission need to be focused and not too fuzzy, otherwise there is a tendency for people to go all over the map.
- Legislators like tangible projects. In addition, there is a bit more flexibility in the capital budget than in the operating budget. To the extent possible, focus on what can be funded within the capital budget.
- Set deadlines for getting things done. If possible, tie them to funds. Use both a stick and a carrot, because people have to have a deadline and feel motivated to make things happen.

Appendix B

Quotes from WCMAC Members on the Rationale for the Need for the COHORT 6-11-2019

A coordinated and well-thought-out plan to respond to emerging environmental issues such as fluctuating salmon returns, sea-level rise, coastal erosion, ocean acidification, and other factors that influence local communities.

Help facilitate and prioritize salmon policy production to bolster economic resiliency and the survival of all creatures dependent on a viable and robust salmon population. Policy and practice.

Collaborative, community-driven efforts are effective ways of identifying issues and potential solutions, if resources allow.

In addressing the impacts of erosion, flooding, storms, landslides, etc. (only part of the issues threatening coastal resilience), a COHORT could elevate local input and concern into decisions that are made far from the impacted area. This approach must quickly and eventually address the social and economic crisis on our coast that has for most of the past decades been all but ignored in favor of "other hazards."

The COHORT can provide innovative, experience-based ideas for coastal resilience that have the buy-in of the coastal communities.

A strategic plan for prioritized action.

How many body bags does the state have on hand and where are the full body bags going to be stored considering all highways are impassable and no electrical transmission lines [will] exist? Suggest US Navy has landing craft capability to land on ocean beaches for needed supplies.

Prepare for sea-level rise.

Should help improve financial resilience.

The COHORT would define the mechanism to develop the structures that might create more coastal resilience.

The COHORT brings about 400 years of experience working on coastal issues of all kinds, and has worked together cooperatively for several years to help with and define such programs as Marine Spatial Planning, etc.

The coast is disproportionally negatively affected by sea-level rise, warming seas, and acidification… yet of tremendous local and global economic output that lifts the State GDP and position globally. We are looking for ways to increase communication among stakeholders and data-driven decision-making in a collaborative environment.

The COHORT will ensure that the state will have a unified, well-coordinated, and effective strategy to enhance resilience to coastal hazards. This will strengthen our communities' ability to survive and thrive in the face of increased threats to our coasts from climate change, sea-level rise, major storms, and episodic events like quakes and tsunamis.

1. Ensure the existing ecological fabric of the coast is not further adversely impacted and actually improved by: a) increased salmon returns by 10%, b) increased coastal recreational shellfish days by ten days in a given year, and c) prevent any further Endangered Species Act listings on our coast. 2. Address the economics by a) reducing the gap between the coastal communities' median incomes and the State's median income; b) reduce by 10% the population on the coast that live in poverty, and c) reduce the unemployment rate by 1.5% within all coastal communities.

Appendix C

National Institute of BUILDING SCIENCES

Mitigation Saves:

For Riverine Flood Mitigation, Federal Grants Provide $7 Benefit for Each $1 Invested

Introduction

Natural hazards present significant risks to many communities across the United States. Fortunately, there are measures governments, building owners, developers, tenants and others can take to reduce the impacts of such events. These measures—commonly called mitigation—can result in significant savings in terms of safety, prevent property loss and disruption of day-to-day life.

The National Institute of Building Sciences Multihazard Mitigation Council (MMC) undertook a study in 2017 to update and expand upon the findings of its *2005 Mitigation Saves* study on the value of mitigation. In the 2017 Interim Study, the project team analyzed two areas of mitigation programs:

- **Federal grants:** The impacts of 23 years of federal grants made by the Federal Emergency Management Agency (FEMA), Economic Development Administration (EDA) and the Department of Housing and Urban Development (HUD), resulting in a national benefit of $6 for every $1 invested.
- **Beyond code requirements:** Designing new structures to exceed select provisions of the *2015 International Building Code* (IBC) and *International Residential Code* (IRC) and the adoption of the *2015 International Wildland-Urban Interface Code* (IWUIC). This resulted in a national benefit of $4 for every $1 invested.

Results of Federal Grants for Flood Mitigation

The public-sector mitigation strategy examined for flood resistance is the acquisition or demolition of flood-prone buildings, especially single-family dwellings, manufactured homes, and 2- to 4-family dwellings. While the benefit-cost ratio (BCR) varies across projects, public-sector mitigation spending for the acquisition of buildings exposed to riverine flooding appears to be cost-effective. The average BCR across the sample projects is approximately 7:1. The implication is that past federally funded riverine flood mitigation is cost-effective (at the cost-of-borrowing discount rate). Given that the total cost of all riverine flood-mitigation grants was $11.5 billion, a BCR of 7:1 implies that federally funded flood mitigation will ultimately save the United States $82 billion. Table 1 provides BCRs for each natural hazard the project team examined. Figure 1 shows the benefits specifically attributable to federal flood mitigation grants. The national-level BCRs aggregate study findings across natural hazards and across state and local BCRs.

An Authoritative Source of Innovative Solutions for the Built Environment

Mitigation Saves: For Riverine Flood Mitigation, Federal Grants Provide $7 Benefit for Each $1 Invested

National Benefit-Cost Ratio Per Peril *BCR numbers in this study have been rounded	Federally Funded	Beyond Code Requirements
Overall Hazard Benefit-Cost Ratio	6:1	4:1
Riverine Flood	7:1	5:1
Hurricane Surge	Too few grants	7:1
Wind	5:1	5:1
Earthquake	3:1	4:1
Wildland-Urban Interface Fire	3:1	4:1

Table 1. Benefit-Cost Ratio by Hazard and Mitigation Measure.

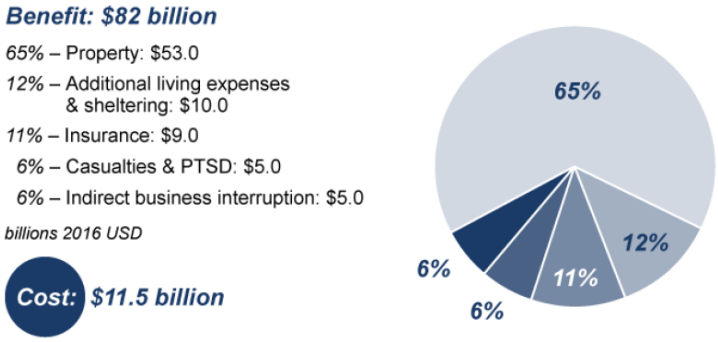

Figure 1. Contribution to benefit from federally funded riverine flood grants.