



Coquille Resilience  
Management Plan:  
“Leaving it better than we found it.”

## Coquille Indian Tribe

3050 Tremont Ave

North Bend, OR 97459

<https://www.coquilletribe.org>



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# A Message from Tribal Council

With great pride and a deep sense of responsibility, we introduce the Coquille Indian Tribe's Resilience Management Plan and Energy Sovereignty Plan. These initiatives reflect our unwavering commitment to protecting our lands, waters, and people while upholding the values and traditions that have guided our ancestors since time immemorial.

The Tribal Resilience Plan is a comprehensive strategy that ensures the Coquille People remain strong in the face of an ever-changing world. Built upon a thorough vulnerability assessment, this plan identifies risks to our natural and cultural resources, infrastructure, and traditional ways of life. More importantly, it lays out solutions grounded in both modern science and traditional ecological knowledge to sustain our lands and waters for future generations.

Alongside resilience, sovereignty remains at the heart of our vision. Our Energy Sovereignty Plan is a bold step toward self-sufficiency, ensuring that the Coquille Indian Tribe controls its energy future. We seek to harness clean, renewable resources in ways that respect the land and honor the wisdom of our ancestors, reducing dependence on outside energy sources while increasing economic and environmental sustainability for our people.

Throughout both plans, we have woven in the teachings of our elders, the strength of our traditions, and the wisdom carried in our stories. These guide our decisions, reminding us that resilience is not just about adaptation – it is about living in balance with our environment and always leaving our world better than we found it.

As we move forward, we welcome collaboration with our partners, allies, and community members who share our vision for a sustainable future. Together, we will ensure that the lands, waters, and cultural practices of the Coquille People endure for generations to come.

With respect and determination,

Coquille Indian Tribe - Tribal Council



# ACKNOWLEDGMENTS

This assessment would not have been possible without the incredibly valuable contributions of many individuals, including those listed below. We thank the Bureau of Indian Affairs Tribal Resilience Program for grant funding to develop the Coquille Resilience Management Plan.

## Tribal Council

Chair Brenda Meade  
Vice Chair Jen Procter Andrews  
Chief Jason Younker  
Secretary / Treasurer Jackie Chambers  
Shelley Estes  
Tony DiBenedetto  
Don Garrett

## Coquille Climate Resilience Task Force, established by Tribal Council resolution #CY23072

Ashley Cordes	Mark Healy	Annette Sandberg
Rocky Doyle	Mark Johnston, CEO	Bailie Severson
Shelley Estes	Anne Niblett	

## Key Tribal Staff

Matt Brown	Brett Kenney	John Ogan	Bridgett Wheeler
Jessica Hamner	Lon Matheny	Alexander Perigon	Natalie Wilson
Fauna Hill	Cara Monson	Kristina Simpson	
Mark Johnston	Kristopher Murphy	Dr. Mark Tveskov	

## Recommended Citation Format

Coquille Tribe. 2025. *Coquille Resilience Management Plan: Leaving it better than we found it*. Coquille Indian Tribe.

Prepared for the Coquille Indian Tribe by





# Preface

NASA defines climate change as a long-term shift in the average weather patterns that characterize Earth’s local, regional, and global climates. These changes—driven by both natural processes and human activities—have produced a range of observable effects across ecosystems, landscapes, and communities.

The phrase “climate change” has become central to a global conversation that touches on science, politics, economics, spirituality, and philosophy. These discussions take place at all levels, from family dinner tables to international institutions such as the United Nations. While the causes and responsibilities of climate change are often debated, this Resilience Management Plan focuses not on apportioning blame but on action.

This document adopts NASA’s definition of climate change and acknowledges the consensus that its causes stem from a combination of natural and human factors. However, this plan does not attempt to analyze or debate those causes. Instead, it centers on how the Coquille Indian Tribe can respond—strategically and compassionately—to protect the health, safety, welfare, and prosperity of its Citizens while contributing positively to the resilience of the broader region and world.

The Coquille People have endured profound changes throughout history—from past climate shifts to colonization and modernization. Despite these challenges, we have remained resilient and grounded in our relationship with the land and our non-human relatives. Today, as the climate crisis intensifies, the Tribe continues to adapt and take deliberate steps to ensure the well-being of current and future generations. This Resilience Management Plan is one such step—a foundational effort in a broader journey toward climate resilience. It recognizes that this journey is ongoing and that adaptive, flexible approaches will be required as the impacts of climate change evolve across our homelands. As such, this is a living document, open to revision as new information, conditions, and priorities emerge. Through this plan, the Coquille Indian Tribe affirms its commitment to thoughtful, place-based action rooted in our values, sovereignty, and profound responsibility to care for the land, our people, and future generations.



# EXECUTIVE SUMMARY

The Coquille Indian Tribe has long demonstrated resilience, adaptability, and a deep connection to its ancestral lands, waters, and nonhuman relatives. However, the Tribe faces growing threats, including riverine flooding, rising sea levels, wildfires, shifting food sources, and ocean degradation. Recognizing that true resilience requires more than adaptation, the Tribe is pursuing a balanced, proactive, strategic approach centered on economic sovereignty, cultural preservation (Appendix A), and environmental stewardship.

## Building Climate Resilience and Sovereignty

The Tribe developed this Resilience Management Plan and an Energy Sovereignty Plan as an investment in our future. Both integrate long-term sustainability into Tribal governance. The Tribe is also embedding climate resilience and energy sovereignty strategies into our long-term strategic plans. We developed these plans based on the Tribe's Climate Resilience Task Force's Community Survey (Appendix B) and our comprehensive vulnerability assessment (Appendix C).

To overcome our key challenges around capacity, the Tribe is leveraging economic development and diversification, ensuring financial independence for sustained resilience efforts. In this manner, the Tribe continues to identify internally driven financial resources that can drive long-term climate and energy solutions.

In this plan, we have identified several strategic priority topic areas.

**Economic and Energy Sovereignty:** Develop Tribally owned renewable energy projects and enterprises to reduce reliance on outside resources, support organizational and individual Tribal citizen resilience, and ensure long-term economic security.

**Workforce Development and Education:** Train Tribal citizens in careers related to resilience, food sovereignty, engineering, and environmental stewardship, ensuring expertise remains within the community.

**Food and Water Sovereignty:** Restore traditional food systems, protect native freshwater and marine fisheries, develop Tribal-led agriculture and aquaculture, advocate for sustainable ocean and river policies, and establish Tribal water rights.

**Land Acquisition and Sovereignty:** Land tenure is fundamental to self-determination. By controlling our own land and acquiring additional lands, we can increase access to traditional food sources, protect water resources, and implement sustainable agricultural practices. This strengthens our food security and ensures long-term resilience in the face of climate change.

**Land and Resource Management:** Strengthen Tribal control over forest lands, promote carbon sequestration, reduce wildfire risk, protect sacred sites, and ensure that resources are available for generations to come.

**Healthy Waters, Lands, and Oceans:** Restore terrestrial, riverine, and marine habitats, integrate Traditional Ecological Knowledge (TEK) with modern science, and advocate for climate-smart resource management policies.

**Strategic Infrastructure and Preparedness:** Invest in resilient housing, transportation, water, and energy systems to protect Tribal enterprises and reduce disaster risks.

**Policy Advocacy and Partnerships:** Ensure Tribal sovereignty is recognized in water, energy, food, and environmental policies, and engage in leadership roles at state and federal levels.





**Ecosystem and Cultural Preservation:** Implement coastal wetland restoration, reforestation, and pollution reduction efforts while integrating cultural knowledge into resource management.

**Responsible Consumption and Pollution Reduction:** The Tribe is committed to a balanced approach while always considering how to leave things better than they found them. The Tribe's no-waste policy is reflected in this plan through actions that follow the five R's: Refuse, Reduce, Reuse, Recycle, and Repurpose.

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***"Weave long ropes, be prepared for the great tide. If you are not prepared, you'll be swept away."***

Chief Jason Younker (Appendix A)

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## **A Self-Determined Future**

By grounding climate resilience in economic self-sufficiency, cultural values, and Tribal governance, the Coquille Indian Tribe is shaping its future—rather than reacting to external pressures. This Plan serves as a roadmap for concrete action and balanced investment to uphold Tribal sovereignty in the face of climate uncertainty.

With strategic leadership, economic security, and environmental stewardship, the Coquille Indian Tribe will continue its role as a guardian of the land and waters—on its terms—for future generations.



Figure 1. Our Coquille Plankhouse is a sacred space for our Tribe.

# INTRODUCTION

The Coquille Indian Tribe has long demonstrated resilience, adaptability, and a deep connection to its ancestral territories' lands, waters, and nonhuman relatives. For millennia, the Tribe has navigated the challenges of changing environmental conditions, federal policies, and economic constraints while striving to uphold its cultural values and exercise its sovereign rights. Today, the impacts of an ever-changing world and natural disasters impose ongoing threats on the Tribe. Riverine flooding, rising sea levels, storm surges, high tides, increased wildfire risks, threats from the Cascadia earthquake, changing ocean conditions, and shifts in traditional food sources are just a few of the pressing challenges we face. Addressing these threats requires more than climate adaptation; it demands a proactive and strategic approach to building long-term resilience.

The Coquille Tribe is prioritizing Tribal resilience and sovereignty and has dedicated staff, funding, and resources to developing a Tribal Resilience Management Plan. We are making good progress on this journey. In July 2023, the Council established our Climate Resilience Task Force for a three-year period (Tribal Resolution CY23072) that includes the participation of Executive staff, a Tribal Council representative, staff across disciplines, and interested Tribal citizens. In 2023, the Council also sent a team of four Task Force members to a week-long Tribal Climate Camp hosted by the three sister Klallam Tribes and the Affiliated Tribes of Northwest Indians. In 2024, we hired a Climate Resilience Specialist. In 2024, we initiated planning and developing our Tribal Resilience Management Plan and Energy Sovereignty Plan. In 2025, we are integrating climate resilience and energy sovereignty strategies into our long-term strategic plans.

While our Tribe has been visionary in our approach to climate resilience, capacity is a primary challenge for our Tribe and is a nearly ubiquitous difficulty across the U.S. However, we recognize that we can address capacity issues through economic sovereignty and diversification. As the Tribe pushes towards economic sovereignty and strengthens our financial position, we aim to provide opportunities to enhance our resilience to climate and natural disasters. We are growing economically while honoring our Tribe and our ancestors in doing the work that we do with good hearts. Balancing external funding with economic growth allows the Tribe to plan and implement long-term solutions where resilience efforts are balanced and strategic. This Plan highlights opportunities for sustainable economic independence, recognizing that self-determined financial resources and external funding empower our Tribe to build the internal capacity necessary to lead our climate resilience efforts.

## A BALANCED APPROACH TO CLIMATE RESILIENCE

We use an approach to planning that is inclusive of our culture, traditions, and citizens while aligning with the principles of climate resilience, economic development, and energy sovereignty. By leveraging economic development opportunities aligned with energy



Figure 2. Coquille Value: *"Do things from a place of love"*

sovereignty, sustainability, and natural resource stewardship, the Coquille Indian Tribe can generate revenues that enable us to support self-sufficiency and invest in our ability to live in a good way, enriched by our cultural heritage, traditional foods, and practices. By grounding climate resilience in economic self-sufficiency, our People, and our culture, the Coquille Indian Tribe ensures that our response to climate change is dictated by our vision, values, and priorities rather than external drivers. Through this approach, the Tribe moves beyond short-term adaptation and towards true self-determined resilience—where economic security, cultural strength, and environmental stewardship work together to sustain the community for generations.

This Plan serves as a roadmap for concrete action and balanced investment to uphold Tribal sovereignty in the face of climate uncertainty. The Coquille Indian Tribe has always stewarded our lands and waters. By embracing Tribal sovereignty through climate resilience, energy sovereignty, and economic development, the Tribe will continue to steward its lands on our terms. The plan includes:

- **The Tribal Resilience Management Plan and Climate Vulnerability Assessment** (Appendix C) presents climate actions and pollution reduction strategies.
- **The Energy Sovereignty Plan** outlines the Tribe’s pathway to energy independence and renewable energy development.

## OUR VISION

Today, we strive to revive our language and culture, infuse the spirit of potlatch into our lives, celebrate our artisanship, and continue our celebrations and ceremonies. Since time immemorial, the Coquille People have sustained deep and reciprocal partnerships with the fellow inhabitants of our homeland, including camas, oak, cedar, and myrtle, berries, bear grass, mussels, clams, salmon, herring, and smelt, crab, halibut, sturgeon, deer, elk, sea otters, whales, and many others. Traditional partnerships and harvesting practices were resilient and inherently and demonstrably sustainable over thousands of years and restoring and sustaining these traditions and these relationships is important to our healing and to the Tribe’s future.

*WE ARE A PROUD,  
POWERFUL AND  
RESILIENT PEOPLE, A  
SOVEREIGN NATION,  
WHOSE BINDING  
THREAD IS OUR  
COQUILLE IDENTITY.  
IN THE FOOTSTEPS  
OF OUR ANCESTORS,  
WE CELEBRATE.*

## OUR VALUES<sup>1</sup>

1. Promoting the health and well-being of Tribal members and our community.
2. Providing equitable opportunities, experience, and services to all Tribal members.
3. Taking care of our old people.
4. Educating our children.
5. Practicing the culture and traditions of potlatch.
6. Considering the impacts to our people, land, water, air, and all living things; and
7. Practicing responsible stewardship of Tribal resources.

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<sup>1</sup> Coquille Indian Tribe. 2025. [Vision and Values](#). Accessed 3/8/2025.



## OUR PEOPLE



*"WE ALL HAVE  
ANCESTORS THAT  
SACRIFICED AND  
SURVIVED SO THAT WE  
CAN MAKE THE CHOICES  
WE NEED TODAY."*

Chief Jason Younker  
(Appendix A)

Our Tribe has lived within the Coquille River Watershed for generations, thriving in the abundant coastal environment of forests, rivers, and marine resources. We traditionally spoke Miluk, Nuu-wee-ya, and Chinuk Wawa under the name KōKwel. A term originating from the word for lamprey, a culturally significant fish.

Our ancestors lived in what is now referred to as Southern Oregon, including but not limited to villages located along the rivers, estuaries, and coastal headlands of our homeland. These communities were maintained over thousands of years, and ancestral presence sustained and tied the Coquille People to these places through time and into the future. Family life was centered on cedar plank houses and radiated outward through webs of reciprocal relationships with extended kin within the community, to

others across the Coquille homeland and beyond. Likewise, then as now, social, spiritual, and economic activities such as weddings, dances, ceremonies, fishing, hunting, crafting, and gathering took the Coquille across this homeland and through these braided relationships, and provided, since time immemorial and into the future, a sustainable and self-determined way of life.

In an effort to erase Indigenous identity, our Tribe was terminated through federal policy in 1954, but our people resisted assimilation, secretly preserving our languages (Miluk, Hanis, and Chinuk Wawa), culture, and traditions. Termination was disastrous to our people's health and culture and forced many of our ancestors to relocate to established population centers. The Tribe was restored as a sovereign Indian Nation (Public Law 101-42) on June 28, 1989. Restoration rapidly led to the adoption of a Tribal Constitution, construction of The Mill Casino, designation of the 5,400-acre Coquille Tribal Forest, reacquisition of a small portion of our ancestral lands, and the establishment of health, education, and housing services to Tribal citizens.<sup>2</sup>

## OUR CLIMATE RESILIENCE TASK FORCE

The Tribe is intent on taking a balanced approach to increasing Tribal resilience and reducing our impact on the climate. The Tribe is motivated in ways few communities are and is already taking proactive steps to serve future generations. In 2023, the Tribe established a Climate Resilience Task Force to make recommendations to the Tribal Council for how the Tribe will adapt to and mitigate the impacts of climate change, including:

- Define specific climate change challenges and issues facing the Tribe, including cost and budget implications.
- Develop strategic climate resilience recommendations for the Tribal Council.
- Prioritize recommendations based on cost, level of effort and resource allocation, level of impact, and other criteria.
- Identify recommendations as short-term, medium-term, and long-term.
- Make recommendations for the Master and Strategic Plans.

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<sup>2</sup> Coquille Tribe. 2019. [Comprehensive Land Use Plan](#). Accessed March 6, 2025.





## Community Survey

The Task Force conducted a community survey to understand how climate impacts our Tribal citizens. Feedback from the community, in concert with research on the Tribe's vulnerability, was used to develop this 2025 Resilience Management Plan (survey results in Appendix B).

Our Tribe is concerned with the impacts of climate on the Tribe's government continuity, the welfare of Tribal citizens, the safety of our community, and the actions necessary to meet the needs of our citizens, wildfire risk to essential services, and economic development.

The Tribe is also concerned about returning our traditional lands and waters to the Tribe, subsistence, natural resource stewardship, and the restoration and preservation of Tribal culture.

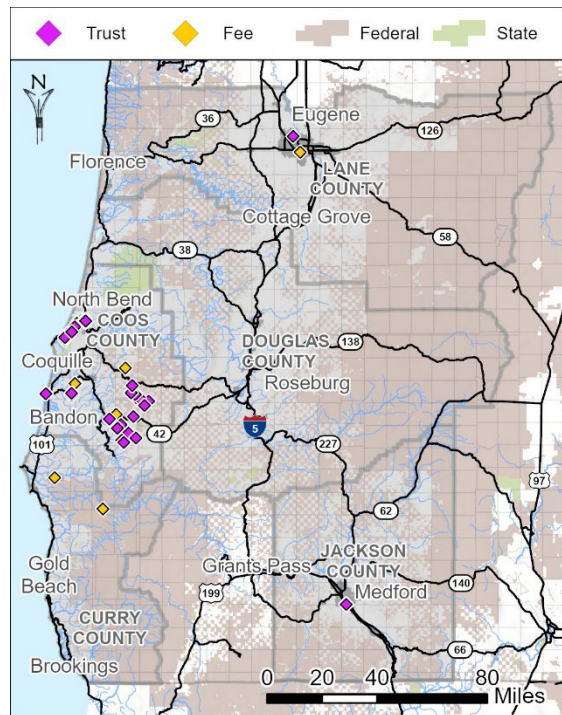


Figure 3. Coquille Tribal properties.

## OUR REGION

Figure 1 depicts the Coquille Reservation within the modern-day context of our homelands, modern area of interest, Federal lands, and state and national forests. This plan covers the five-county Tribal service area (Coos, Curry, Lane, Douglas, and Jackson Counties), the Oregon Coast, and the Tribe's trust and forest lands.

### Trust Lands

Soon after restoration in 1989, the Tribe acquired 1,100 acres between Empire and Charleston, OR. Part of the property became Kilkich (Figure 2), an area featuring housing, administrative, wellness, educational, and storage buildings, as well as our Plankhouse. The Tribe is engaged in long-term planning for the undeveloped areas of the Kilkich property. The Tribe has also recently established Trust lands in Eugene and Medford.

### Tribal Administration and Mill Casino & RV Park

In 1995, the Mill Casino Hotel and RV Park was established on a former plywood mill site on the shores of North Bend, with our administrative building located across the street.

### Coquille Forest

In 1996, the Coquille Forest Act enabled us to resume stewardship of 5,410 acres of our ancestral homelands, which were placed into trust for the Tribe two years later. The Forest allowed a rebirth of the Tribe's traditions and cultural renewal.

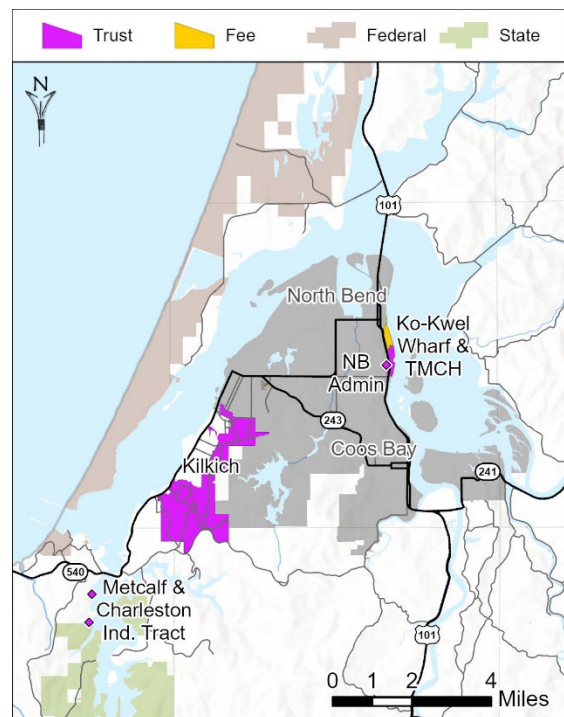













Figure 4. Kilkich and Coos Bay properties.



## OUR CONCERNS

Tribal citizens are concerned about many climate change-related environmental and social hazards. Table 1 summarizes input from the Climate Resilience Task Force Community Survey.

Table 1. The Climate Task Community Survey identified the following concerns.

<b>Environmental Hazards:</b>  <ul style="list-style-type: none"> <li>• Increasing danger from heat, fires, floods, windstorms, and landslides.</li> <li>• Water shortages during the summer.</li> <li>• Effects on people's lives due to natural disasters</li> </ul>	<b>Health and Well-being:</b>  <ul style="list-style-type: none"> <li>• Impact on air quality, especially due to wildfires.</li> <li>• Concerns about clean air and its effects on health.</li> <li>• Concerns about allergens and safety due to harmful algal blooms, diseases in wildlife.</li> </ul>	<b>Socioeconomics:</b>  <ul style="list-style-type: none"> <li>• Economic challenges associated with climate change and the development of energy-efficient solutions.</li> <li>• The cost to the Tribe of becoming climate resilient.</li> </ul>
<b>Preparedness and Adaptability:</b>  <ul style="list-style-type: none"> <li>• Preparedness for climate emergencies, including fires, drought, and extreme temperatures.</li> <li>• Adaptability to changing weather patterns and climate impacts.</li> </ul>	<b>Sustainability and Environmental Footprint:</b>  <ul style="list-style-type: none"> <li>• Efforts to reduce environmental footprints through energy efficiency and waste reduction.</li> <li>• Concerns about sustainability and carbon emissions.</li> </ul>	<b>Interconnected Issues:</b>  <ul style="list-style-type: none"> <li>• Issues related to water conservation, power generation, and access to essentials.</li> <li>• Concerns about the effects of climate change on agriculture, allergies, and recreational areas.</li> </ul>
<b>Infrastructure and Resources:</b>  <ul style="list-style-type: none"> <li>• Unreliable power grids and frequent power outages.</li> <li>• Water scarcity and related shortages of food and electricity, as well as challenges in fighting wildfires.</li> <li>• Rising temperatures affecting crop production</li> </ul>	<b>Biodiversity Loss and Ecosystem Impacts:</b>  <ul style="list-style-type: none"> <li>• Extinction and irreversible loss of biodiversity.</li> <li>• The impact of fires and deforestation on our indigenous homelands.</li> <li>• Decline of natural resources and wildlife: salmon, game, kelp, eelgrass, plants, and shellfish.</li> <li>• Effects on marine life.</li> </ul>	<b>Global Concerns:</b>  <ul style="list-style-type: none"> <li>• Changes in global weather patterns.</li> <li>• Effects on public health, agriculture, and habitat.</li> <li>• Inadequacy of efforts to address it internationally.</li> <li>• Existential threat to the planet and humanity</li> <li>• Climate refugees</li> </ul>
<b>Community and Societal Impact:</b> <ul style="list-style-type: none"> <li>• Challenges to Tribal traditions and ecosystems affecting future generations.</li> <li>• Lack of awareness and education on climate change.</li> </ul>	<b>The impact on Tribal gatherings, traditional foods, and craft materials.</b> 	<b>Future Generations:</b>  <ul style="list-style-type: none"> <li>• Ensuring a livable climate for future generations.</li> <li>• Concerns about the world are left for children and grandchildren.</li> </ul>

Neighboring communities share the Coquille Tribe's concerns about climate resilience, and many of them have conducted research and developed plans to address climate change along the Pacific coast. The Tribe will benefit from regional efforts while contributing its traditional knowledge and land stewardship practices to support broader resilience. Equitable participation in decision-making is essential for Tribal sovereignty, self-determination, and long-term resilience. Moving forward, the Tribe's ability to restore ecosystems, steward natural resources, and live sustainably will be vital for both its people and the environment.

## OUR PRIORITY RESOURCES










Table 2 identifies the resources and habitats identified as priorities by the Tribe. These resources are organized by habitat type, species, processes, and infrastructure. Upland and riparian forests, wetlands, freshwater, and marine aquatic habitats support the species that the Tribe has depended upon since time immemorial.

Table 2. Priority Resources for the Coquille Tribe

Habitat Type	Classification	Species or Process
<b>Forests</b>		
	Berries	Huckleberry, salmonberry, blackberry, elderberry, Salal berry
	Trees	Douglas Fir Cedar (Red and White) Oak Spruce Hazel
	Animals	Deer and Elk
	Processes	Wildfire Distribution shifts Disease
<b>Aquatic Habitats</b>		
Wetlands	Plants	Wapato, Camas, Tule
Riparian	Animals	Eagles
Freshwater	Animals	Fall and Spring Chinook, Salmon, Steelhead, and Lamprey
Marine	Shellfish	Clams, Crabs, Abalone
	Animals	Salmon
	Processes	Sea Level Rise Storm Surges Hypoxia Harmful Algal Blooms Ocean Acidification
<b>Infrastructure Process</b>		
Water System	Drinking Water Storage and Distribution Wastewater Treatment and Storm Drains	
Roads	High Tide Flooding, Sea Level Rise, Erosion, Landslides, and Flooding of Transportation Networks	

## OUR CHANGING CLIMATE<sup>3</sup>

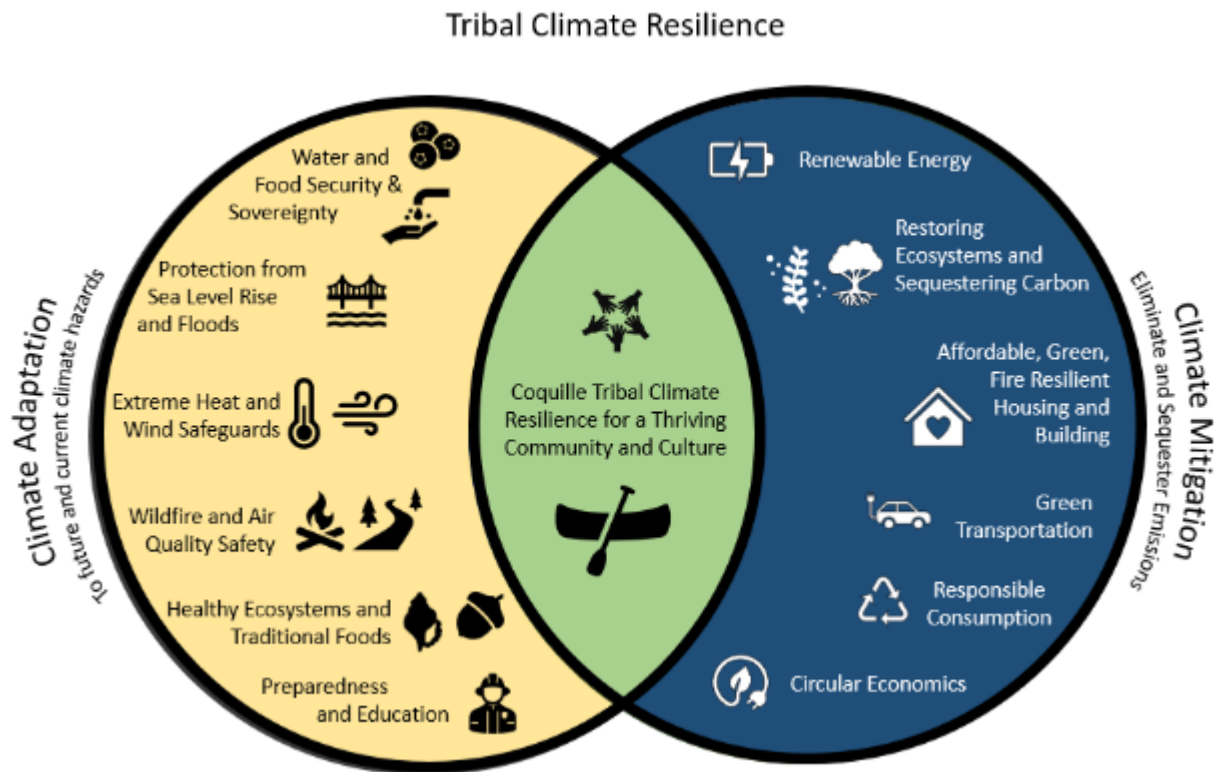
Climate change is warming our lands and oceans, altering precipitation patterns, causing sea levels to rise, shifting the ranges of plants and animals, and harming the health of our planet. A vulnerability assessment was performed based on the concerns and priorities of the Tribe, which focuses on the Trust lands in Coos County, Oregon, the Oregon Coast, and more broadly on the area of the Tribe's historic use. The Tribe has other business enterprises that were not included. The following impacts are described in a detailed vulnerability assessment in Appendix C.

Table 3. Summary of Climate Impacts	
	Increases in low overnight temperatures are causing record-high daytime temperatures, and marine heatwaves are harming first foods, forests, and aquatic ecosystems. Higher ocean and stream temperatures threaten our first foods.
	Changes in the type and timing of precipitation have cascading effects on ecosystems. Less precipitation affects water security, while heavy precipitation causes floods, landslides, erosion, and washing out roads.
	Decreased snowpack affects the snowmelt-fed streams and estuaries that salmon depend upon.
	Warmer temperatures, longer summer dry seasons, drier soils and vegetation, and diseased trees are contributing to increased fire frequency and burned areas, lengthening our wildfire season and threatening our infrastructure, ecosystems, and health.
	Warmer temperatures are drying out forests and wetlands, increasing fire risk, and impacting the wildlife and plants we depend on. Drought has far-reaching effects.
	Wildfire smoke and fires, heavy precipitation, storm surges, and floods are affecting infrastructure, including roads, bridges, drinking water, and Tribal enterprises. Lost tourism revenue and rising costs from natural disasters are affecting the Tribe.
	Ocean acidification, increasing ocean temperatures, hypoxia, algal blooms, and marine heatwaves are causing diseases and die-offs, triggering trophic cascades, leading to losses in kelp forests and eelgrass meadows, altering food webs, reducing biodiversity, impacting salmon, shellfish, and other subsistence resources, and affecting Tribal culture.
	The changing climate impacts traditional foods, ranging from shellfish to salmon, as well as fruits, nuts, and roots. The expected ecosystem shifts will further impact food sovereignty.
	Our forested homelands are experiencing outbreaks of insects, diseases, die-offs, and wildfires. Forestry is important to our economy and critical to protecting our waters, fish, wildlife, and traditional foods. It requires wise stewardship.

<sup>3</sup> Coquille Indian Tribe. 2023. Resolution CY23061: [Approval of Draft Climate Resilience Task Force Governing Provisions](#). June 16, 2023.

# CLIMATE RESILIENCE

Climate resilience is the ability to anticipate, prepare for, and recover from the effects of climate change. Climate resilience involves assessing our understanding of climate-related risks and taking steps to better manage and mitigate these risks.



## HOLISTIC PERSPECTIVE

The Coquille Tribe is taking action towards Tribal resilience by incorporating traditional values, proactively addressing climate challenges, intentionally reducing our carbon footprint, and strategically investing in our people to build a more resilient and empowered Tribal nation for future generations.

Actions that build resilience and mitigate the climate crisis, align with personal and collective values, build self-efficacy, and empower individuals and communities to contribute to solving the global climate crisis while reducing climate-induced anxiety. Actions that reduce climate threats and restore balance between humankind and nature provide the most significant benefits for future generations.

The climate solutions that the Tribe has identified have a wide range of benefits that flow from economic, energy, water, and food sovereignty, including improved public health, sustainable growth, water rights, subsistence rights, restoration of ecosystems, protection of biodiversity, workforce development, preparedness, and resilience to extreme weather events. These actions are centered on our values and beliefs, as well as our desire to create a thriving economy that will benefit our people for generations to come.



## BUILDING UPON A STRONG FOUNDATION

The Tribe is already working to enhance its water, food, and energy security and sovereignty, reduce risks associated with climate-related hazards, and protect the habitats and species sacred to the Coquille People. The following steps have been or are being taken to increase the Tribe's overall capacity to address climate change:

- Establishing a Climate Resilience Task Force.
- Hiring a full-time Climate Resilience Specialist in 2024, increasing the Tribe's capacity to implement resilience plans and adaptive management strategies.
- Developing this Resilience Management Plan.
- Developing plans to position the Tribe to be shovel-ready for energy sovereignty project funding with help from the BIA Tribal Community Resilience Program.
- Developing best practice guidelines for Tribal departments that increase the sustainability of the Tribe.
- Pooling recommendations from the Tribal community and experts.
- Participating in educational opportunities to learn more about climate impacts and ways to increase the Tribe's resiliency.
- Developing sustainability and climate change recommendations.





# A COQUILLE STORY: WEAVING LONG ROPES - ORAL TRADITION AND THE GREAT TIDE<sup>4</sup>

*by Chief Jason T. Younker (shared with permission)*

*Not so many years ago, my uncle took me high up on Sundown Mountain, just north of Brookings on the southern Oregon coast. I had just started my first quarter in graduate school at the University of Oregon with no clear career path. It was late in the afternoon, and we had driven halfway up the mountain and hiked to the place we were sitting – on large rocks in a mountain prairie, surrounded by once-deep elk-hunting pits now eroded to shallow basins. We looked toward the ocean as the fog belt grew offshore and watched it slowly weave its way through the valleys below. The sun was making a swift exit; the crimson sky was like the flames that swept over the grassy hills that Native people burned every few years to keep the country open.*

*“You see, Jason, how the fog is coming in?” he said, gesturing to the valley below. “It wasn’t long ago when our people learned a great lesson, and a great tide would sweep many of them away. Just like the fog comes in now, the great tide would come in like that.*

*“They were told by their elders ‘to weave long ropes because you never know when a big tide is coming, and you won’t have much time. If you don’t have long ropes when the waters rise, you’ll be swept away.’ They were warned over and over, but few paid attention. Many just ignored the warnings and went about their daily business.*

*“Soon after, an offshore earthquake made a big tide. The waters rushed up the valleys and quickly overwhelmed many in the villages. Only those who had listened to the elders were prepared.*

*“The waters rose violently. Many of the people were unable to make it to their canoes. Those few who had prepared for the great tide quickly gathered their ropes. The water rose higher and higher until the tops of the tallest trees were visible. Those who had ropes quickly tied their canoes to the treetops. Soon all the trees were covered by the rising water. The water kept coming in – rising even higher. Some didn’t have long enough ropes and eventually they too were carried off by the rising waters. Only a few remained, and these were the wiser ones who had heeded the elders’ warnings. Others were swept away, never to be seen again. The waters eventually receded, and though many died, some people survived.”*

*By the time my uncle finished telling the story, the fog had made its way up the valleys below and only the tallest of trees were visible. The fog kept crawling in as if it were the great tide described in his story. We watched the sun go down, and the fog settled slowly around us. As my uncle and I hiked down Sundown Mountain that afternoon, I contemplated the meaning of his story. The elders had warned, “Weave long ropes, be prepared for the great tide. If you are not prepared, you’ll be swept away.” Those who listened to their elders would be spared and not swept away. As my studies progressed and years passed, I began to understand that the meaning of any story is personal – each individual will interpret what is applicable to his or her lives. Possibly for my ancestors, there were multiple lessons: first, there are certain things you should do in the event of a great tide; second, you should heed the wisdom of your elders; third, you should respect your environment and the resources you rely on; and fourth, you should never forget the lessons you have been taught. For me, my uncle taught me a life-long lesson – to never stop weaving my rope. As long as I maintain my rope, I will never be swept away and forget where I am from. And perhaps this is the fundamental purpose of many Native American stories on the Pacific coast, regardless of the circumstance – to never forget where you are from. I will always be tied to the tallest of trees at South Slough of Coos Bay, Oregon.*

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<sup>4</sup> Younker, J. 2007. Weaving Long Ropes: Oral Tradition and Understanding the Great Tide. Oregon Historical Quarterly, 108 (2): 193-201. DOI: <https://doi.org/10.1353/ohq.2007.0094>

# CLIMATE RESILIENCE ACTIONS

The following climate resilience actions were developed through workshops with the Tribal Council and the Tribal community, staff interviews, the Tribal climate resilience survey, the Climate Resilience Task Force, and guidance from the Coquille Tribal Council. The vision, goals, and suggestions of the community were compiled and refined utilizing the Tribal Resilience Action Database<sup>5</sup>, U.S. Climate Resilience Toolkit<sup>6</sup>, EPA Climate Change Adaptation Resource Center<sup>7</sup>, Regenerate<sup>8</sup>, and Project Drawdown.<sup>9</sup> In addition, local, state, and federal plans were examined to understand the actions already being taken, evaluate suitable partners, and consider how partnerships could amplify the Tribe's efforts to increase our capacity.

This flexible, evolving plan guides the Tribe's resilience efforts while preserving future options. It builds on the Tribe's solid foundation, expands capacity, and ensures community involvement in solutions. Prioritizing Tribal rights, land acquisition, and sustainable programs will strengthen long-term resilience. It outlines carefully considered actions while recognizing the scale of response needed. As a living document, it will evolve, serving as both a foundation and a commitment to strengthening the Tribe's resilience. The Tribe serves as an example, benefiting the greater good by taking a leadership role in climate action: *lifting all canoes and weaving a long rope*.

Our Tribe is committed to continuing its leadership in climate action by building upon existing initiatives, engaging Tribal staff and citizens, and strengthening resilience. By leveraging past successes, the Tribe can pursue short-term and long-term strategies. Prioritizing strategic partnerships will further amplify these efforts, allowing us to collaborate with others to achieve shared climate goals. These actions center on the themes (Figure 5) associated with 1) Economic Sovereignty, 2) Resilient Infrastructure, 3) Water Sovereignty and Stewardship, 4) Wildfire Risk and Hazard Reduction, 5) Indigenous Food Sovereignty and Stewardship, 6) Healthy Oceans, Estuaries, and Marine First Foods, and 7) Pollution Reduction, but also include many actions that cross between these themes.

A compilation of the detailed climate resilience actions is provided in Appendix D.



Figure 5. Themes of the primary Climate Resilience Management recommendations presented in the plan.

<sup>5</sup> Tribal Resilience Action Database. 2025. <https://tribalresilienceactions.org>. Accessed on 3/7/2025.

<sup>6</sup> U.S. Climate Resilience Toolkit. 2025. <https://toolkit.climate.gov>.

<sup>7</sup> EPA 2025. Climate Change Adaptation Resource Center (ARC-X). <https://www.epa.gov/arc-x>.

<sup>8</sup> Regeneration. 2025. <https://regeneration.org>.

<sup>9</sup> Project Drawdown. 2025. [Project Drawdown](https://projectdrawdown.org).

## ECONOMIC SOVEREIGNTY

**Economic Sovereignty supports the stability, prosperity, and resilience of our Tribe.** The Tribe is leading and exploring visionary economic development ventures. Climatic impacts can be costly but also present an opportunity for change and growth, as well as a market for innovative solutions. Tribal economic endeavors and enterprises provide a strong foundation for building a circular and balanced economy that sustains the Tribe. Economic Sovereignty is fundamental for increasing Tribal capacity to cope with climate risks and associated societal changes. Many climate-smart business models could expand the Tribe's enterprises and increase our resiliency while mitigating climate pollution. The following actions should help to evaluate our options and pursue solutions.

### **Develop strategic plans based on economic analyses.**

1. Perform an Economic Opportunities Analysis for Sustainable Economic Enterprises
2. Develop a Capital Improvement Plan after the Strategic Planning process

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*Potlatch - An important Coquille value that we practice liberally and hold dear to our heart. It speaks to our inheritance as the earth's inhabitants, and it reminds us to co-create abundance with the land through wise stewardship so that we can continue to be generous.*

Anne Niblett (Appendix A)

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### **Workforce Development**

1. Develop a Workforce Development Program centered on a climate-resilient economy.
  - a. Building a local renewable energy and electrification workforce to meet the demand for renewable energy, electrical, and HVAC upgrades.
  - b. Provide educational opportunities that involve Tribal citizens in strategic planning, climate planning, economic analyses, and market forecasting.
  - c. Offering incentives for Tribal citizens to pursue careers that support the Tribe's management of natural resources, food production, and climate mitigation efforts.

### **Sustainable Business Development.**

1. Lead economic development opportunities that align with the Tribe's core values.
2. Explore and evaluate potential business ventures that will raise capital and build the Tribe's capacity to respond to climate change.
  - a. Fire-safe housing is already in demand and needed. Building upon Tribal One's existing efforts in the construction industry, a Tribal enterprise that builds or retrofits homes to be fire-resilient and solar-ready will be ready to repair and rebuild infrastructure that could be lost due to wildfire.
  - b. Building expertise in renewable energy, regenerative agriculture, ecological restoration, emergency management, sustainable development, and business ventures that are putting these into practice will help the Tribe meet its own needs.

Tribes are uniquely positioned to address climate impacts in ways that many communities are not. Tribes can become energy-independent, achieve net-zero energy, and ultimately become carbon-negative, offsetting carbon emissions. Additionally, numerous economic opportunities exist in relation to climate solutions, and these opportunities are expected to grow in the future. New business models have emerged around a climate-smart economy, including decentralized off-grid energy systems, fire-resilient homes, soil health and resilient food



production, and ecological restoration. The Tribe has historically provided for its own needs and can do so again while helping others in alignment with the Tribe's values and potlatch.



Figure 6. Housing and Health Clinic at Killich.



## ENERGY SOVEREIGNTY

As a Sovereign Tribal Nation, our people strive for self-sufficiency and control of our own energy future. This plan outlines a sequenced map of strategies for steadily strengthening Tribal energy resilience, embracing aligned opportunities in technology and markets, and building upon previous actions to achieve energy sovereignty. Aligned opportunities are those that harness clean, renewable resources in ways that respect the land and honor the wisdom of Tribal ancestors, reduce dependence on outside energy sources, and increase economic and environmental sustainability for our people.

### Plan Goals

All actions contribute to three overarching goals:

1. Establish Energy Resilience: Reduce disruptions, damage, and recovery time
2. Strengthen Economic Resilience: Minimize volatility in energy and fuel operating costs
3. Achieve Energy Sovereignty: Self-sufficiency and control of our energy future

#### **Energy Resilience:** *Reduce disruptions, damage, and recovery time*

As power and fuel supply disruptions become more frequent and prolonged, it is a priority for the Tribe to invest in systems and programs that ensure energy security for our community and the critical services we rely on. These actions are designed to focus initial resources on critical facilities and services at Kilchick and progressively expand outward. Ultimately, the goal is for all our Tribal citizens and operations to benefit from the security of a continuous energy and fuel supply that can support lives and livelihoods without interruption. This goal also fosters a deeper understanding of the state of readiness and availability of resources for members of the broader communities in which the Tribe has a presence, enabling better preparation and coordination of planning and recovery efforts. Thus, one of our objectives to accomplish this goal is:

- Three Weeks Readiness - Provide renewable power security for essential loads at critical facilities, shelters, and operations

#### **Economic Resilience:** *Minimize volatility in energy and fuel operating costs*

In addition to steadily increasing costs, imported energy and fuel are subject to multiple external factors contributing to price volatility. This volatility can significantly impact the bottom line and viability of Tribal operations, as well as the individual budgets of our citizens, the Coquille People. This goal is designed to align efforts toward conservation and producing as much energy and fuel as is consumed over the course of the year as a hedge against rising costs. To meet the needs of this goal, we aim to:

- Net-Zero Energy - Generate as much energy as we use annually
- Net-Zero Transportation - Generate as much fuel as we use annually

#### **Energy Sovereignty:** *Self-sufficiency and control of our energy future*

Achieving energy sovereignty will empower our Tribe to control our own energy resources, reinforcing our commitment to self-determination and our economic development efforts through job creation, revenue generation, and reduced energy costs. An investment in robust physical infrastructure will yield reliable, affordable power, a skilled workforce, and a strong position in the energy economy. Thus, we strive to:



- Provide for the energy needs of the Tribe and Coquille People independently of external factors

## Meeting Our Future Energy and Fuel Needs

Forecast energy and fuel needs at Kilich take into consideration population growth, electrification of gasoline-based transportation, conservation

measures, and greater temperature extremes. **Appendix E** provides a detailed summary of our current energy sources, present-day energy consumption, and future energy needs.

## Energy Action Plan

The following suggested phased actions are long-looking, durable building blocks of self-sufficiency toward control of our energy future. **Appendix F** contains a detailed Action Plan that includes recommended actions, resources, strategies, and tools available to our Tribe.

### Phase 1: Resilience Hub, Conservation Integration, and Building Capacity

#### Facility-based Microgrids

- Seek BRIC funding for the Resilience Hub at Kilich
- Evaluate and prioritize other funding: Solar plus storage at other Kilich facilities
- Evaluate energy and microgrid options for other Tribal facilities

#### Residential and Community Solar

- Evaluate distributed vs. community solar options
- Investigate the coordination of Solar for All and other grants for Kilich residents
- **Appendix G** contains detailed solar and energy storage feasibility reports for our Tribe.

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*This Energy Action Plan (Appendix F) includes phased actions that progressively and aggressively build upon each other, ultimately moving the Tribe towards energy sovereignty.*

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#### Energy Efficiency

- Investigate expansion of residential incentives with Energy Trust of Oregon (ETO)
- Continue and expand the Energy Trust of Oregon's Strategic Energy Management program for Tribal facilities
- Integrate conservation empowerment into workforce and learning center programming

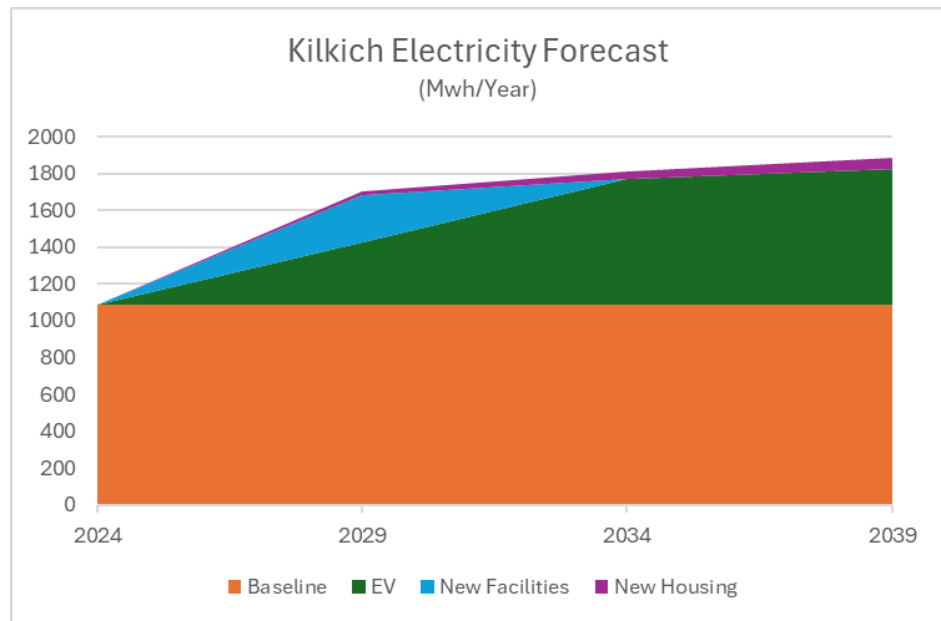


Figure 7. Electricity needs forecast for Kilich through the planning horizon

### *Transportation*

- Evaluate the need for additional EV charging stations
- Consider coordinating mass transit planning with local transit agencies
- Investigate renewable diesel and electrolytic hydrogen production
- Plan Tribal fleet modernization

### *Master Planning Integration*

- Evaluate net-zero energy and high-efficiency building standards for adoption
- Evaluate high-elevation water storage development
- Incorporate human-powered transportation corridors
- Employ passive solar and low-impact stormwater design principles
- Identify suitable locations for large-scale energy generation

### *Empowering Our People*

- Participate in state advisory for Solar for All program
- Explore enterprise opportunities, including solar plus storage, efficiency upgrades, net-zero tiny home construction, grid modernization, clean fuel production, virtual power plant aggregation, microgrid operations, clean fueling stations, and utility establishment.
- Identify energy career development pathways with Tribal and other partners
- Dedicate energy champions for internal coordination and external engagement
- Proactively engage in and influence water and energy utility system and resource planning

## **Phase 2: Campus Microgrids, Net-Zero Energy Tribal Nation, and Power Flow Control**

The second phase builds upon the actions taken in Phase 1 to meet the Tribe's priorities.

### *Microgrid Campus Expansion and Virtual Power Plant*

- Integrate solar, storage, and energy management into Kilkich Virtual Power Plant and Microgrid
- Develop long-duration energy storage for Kilkich
- Develop microgrids at other facility locations

### *Conservation, Net-Zero Facilities, Commerce, and Recreation*

- Implement energy efficiency upgrades for Tribal facilities
- Expand energy generation for net-zero Kilkich with floating solar or solar farm
- Develop energy generation for net-zero consumption at other Tribal facilities and operations

### *Transportation*

- Implement gasoline fleet modernization to 50% EV
- Evaluate resources for EV charging for Coquille People abroad
- Potential renewable diesel, hydrogen, or other clean fuel production and fueling

### *Empowering Our People*

- Implement or grow selected energy services enterprises



- Internalize Killich energy systems maintenance and operations
- Provide clear energy workforce and business incubation pathways for our people
- Actively engage in utility, state, and regional energy planning and policy
- Implement the utility establishment roadmap

### **Phase 3: Security, Wealth, and Autonomy**

The third phase is built upon the actions taken in Phases 1 and 2 to meet the Tribe's goal of achieving Tribal Energy Sovereignty.

#### *Ownership and Oversight of Microgrids and Energy Infrastructure*

- Establish direct or contracted ownership and oversight of distribution, transmission, generation, aggregation, and transportation fueling or charging infrastructure

#### *Transportation*

- Complete gasoline fleet modernization to 50% EV
- Reevaluate resources for EV charging and fuel access
- Potential renewable diesel, hydrogen, or other clean fuel production and fueling

#### *Expand the Tribal Circular Energy Economy*

- Capture Tribal energy and fuel expenditures back into the Tribal economy
- Support energy sovereignty investments for our people abroad with energy revenue

#### *Expand Energy Market Revenue*

- Implement or expand upon selected energy enterprises such as clean fuels manufacturing, fueling stations, Virtual Power Plant aggregation, energy resource sales, clean tech manufacturing, and franchise income

#### *Empowering Our People*

- Support trained workforce and qualified business entities to serve Tribal energy interests and select broader community and markets

## INFRASTRUCTURE STEWARDSHIP

Resilient infrastructure strategies vary, but key principles remain consistent. Planning and design recommendations include assessing climate risks over a project's lifespan and selecting safer locations; accounting for uncertainty by designing projects in stages and adapting as climate conditions evolve; incorporating flexibility with adaptable architecture, such as mobile or multifunctional structures, and power systems that allow future expansion; enhancing adaptability to reduce waste, repurpose spaces, and accommodate changing uses; and ensuring redundancy and self-sufficiency so that failures in one system don't impact the whole. This includes microgrids, backup power, and separate utility systems for easier maintenance and upgrades.<sup>10</sup>

The following suggestions for design and materials are examples that the Tribe could consider incorporating into future infrastructure plans. This list is not exhaustive but rather serves as an example of the types of choices available.

### Flood and Storm Protection

- Build on higher ground or elevate structures.
- Utilize graded sites, permeable surfaces, and effective drainage to manage water effectively.
- Flood-prone buildings should be floodproofed with waterproof materials and barriers.
- Locate critical systems on upper floors.
- Strengthen wind resistance through bracing, reinforced connections, and aerodynamic designed buildings.

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*Come with a good heart: Before you gather a resource, weave a basket, bead a necklace, get in a canoe, etc., it is important to check your intentions, or the place of creation in your inner being, and be sure that your heart is in the right place before you begin your work. Smudge is used beforehand to help, and tobacco is often given as gratitude to the land when a resource is taken.*

Anne Niblett (Appendix A)

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### Heat and Drought Resilience

- Optimize building orientation to maximize ventilation and minimize sun exposure.
- Increase shade with vegetation.
- Utilize passive heating and cooling methods (such as cross-ventilation, window shades, ceiling fans, and triple-glazed windows) in conjunction with mechanical cooling.
- Collect rainwater in tanks or cisterns for irrigation in areas prone to drought.

### Durable and Low-Carbon Materials

- Sustainable concrete innovations include self-healing concrete, CO<sub>2</sub>-absorbing concrete, and porous cement that supports vegetation.
- Cool roofs and pavements reflect sunlight, reducing heat absorption.
- Smart windows and hydroceramic surfaces help to regulate temperature.
- Wildfire-resistant materials include metal siding, asphalt shingles, and fiber cement.

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<sup>10</sup> Cho, R. 2024. [The Case for Climate Resilient Infrastructure](#). State of the Planet: News from the Columbia Climate School.



## Roads and Bridges

Climate change poses a significant threat to transportation systems through sea-level rise, extreme weather events, and rising temperatures. Coastal regions are frequently affected by storm surges and flooding, which can damage roads, bridges, railways, ports, and airports. Inland areas experience heavy rain, flooding, and landslides that affect highways and railways, while drought and extreme heat increase wildfire risks. Rising temperatures damage infrastructure by cracking roads, warping rail tracks, and overheating vehicles. Air travel is also impacted as heat affects runways and flight performance.<sup>11</sup> The Tribe is already experiencing high-tide nuisance flooding that affects area roads, as well as landslides and mudflows that wash out major transportation arteries. High-tide flooding is projected to become much more frequent and severe. The Tribe manages a limited number of roads but relies on roads managed by the Oregon Department of Transportation, counties, and local cities. Collaborative efforts to repair, protect, and reroute roads are recommended as sea levels continue to rise. In the near term, focusing on adding evacuation and supply routes to housing at Kilkich by upgrading the Grinnell Rd. and Libby Lane access roads and installing access gates. Additionally, considering options for evacuation by sea, such as boats or ferries, will be important for enhancing Tribal resilience.

## Housing

Intergenerational access to housing is very important to Tribal Resilience. Thus, we plan to acquire and devote Tribal land to increase the supply of affordable fire-resilient housing for Tribal citizens. We will also consider options for creating off-grid housing with integrated water recycling, wastewater treatment, and energy systems that are autonomous, thus increasing resiliency options and reducing the impact of new housing.

## Water Barrier Technological Solutions

For areas or enterprises that are prone to flooding by the compound effects of sea level rise, high-tide flooding, and storm surges, options for infrastructure protection include the installation of permanent flood barriers (including low-level berms, or larger dikes or levees), [flood gates](#) at driveways and sidewalk access points, or temporary flood barriers (solutions include various inflatable, fillable, or mobile systems).

## Waste Management Systems

Urban wastewater systems have significantly improved public health and reduced pollution over the past 150 years. However, they can fail when stressed beyond their design limits due to poor materials or external hazards like heavy rainfall or earthquakes. Failures can lead to environmental pollution and public health risks, such as sewage contamination from combined sewer overflows during storms or infrastructure damage.<sup>12</sup>

Housing at Kilkich, the Mill Casino, and Tribal offices are serviced by the Coos Bay Wastewater Treatment Plants I and II and a sanitary sewer system with tide gates to prevent seawater from entering the system. These are very close to sea level, at risk of flooding or short-term storm surges, and of sewage backups during extreme precipitation events that are accompanied by high tides. During an emergency, especially those caused by flooding, Kilkich and the Mill Casino may need to manage sewage and wastewater. Using fresh, clean drinking water to flush away human waste is convenient, but creating a closed-loop

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<sup>11</sup> EPA. 2025. [Climate Change Impacts on Transportation | US EPA](#).

<sup>12</sup> Hughes, J., K. Cowper-Heays, E. Oleson, R. Bell, A. Stroombergen. 2021. [Impacts and implications of climate change on wastewater systems: A New Zealand perspective](#). Climate Risk Management. 31





water/wastewater system would be more sustainable. Sewage and wastewater contain valuable nutrients and freshwater that can serve as resources rather than pollutants.<sup>13</sup>

However, there are viable, proven alternatives that could expand the Tribe's options for managing wastewater for housing and emergency management while increasing our sustainability. The following options are listed from low to high effort:

- Rent or purchase portable toilets for emergency use.
- Purchase a portable building with toilets and showers.
- Build a public composting toilet at Kilkich.
- Install composting or incinerating toilets in critical resiliency centers, such as the health clinic and the Plankhouse.
- Invest in gray water infrastructure.
- Consider investing in green wastewater treatment on Tribal lands or in collaboration with the Coos Bay North Bend Area Water Board. ([Research: Switching to green wastewater infrastructure could reduce emissions and provide huge savings.](#))

### Drinking Water

- See the Water Sovereignty and Stewardship section.

### Using Green Infrastructure to Protect Coasts<sup>14</sup>

Living shorelines utilize natural elements, such as plants, reefs, sand, and barriers, to mitigate erosion and flooding while preserving coastal processes. They are more resilient and cost-effective than hard structures, such as bulkheads and seawalls, and require less maintenance. Additionally, they improve water quality, support habitats, and help capture carbon. Restoring wetlands can also reduce property damage by absorbing wave energy.

#### Components of Living Shorelines<sup>15</sup>

- Native wetland plants - Adapted to local conditions, enhancing stability.
- Stone and rock structures - Reduce wave impacts.
- Mussel beds and oyster reefs - Improve water quality and habitat diversity.
- Submerged aquatic vegetation - Reduces erosion and boosts productivity.
- Coir fiber logs - Provide temporary stabilization as plants establish.
- Sand fill - Helps restore eroded areas and raise the elevation.

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<sup>13</sup> Mongabay. 2025. [Innovative sewage solutions: Tackling the global human waste problem.](#)

<sup>14</sup> US EPA. 2025. [Protect Coasts. Using Green Infrastructure to Protect Coasts.](#) Accessed on March 7, 2025.

<sup>15</sup> NOAA. 2025. [What is a living shoreline?](#) Accessed on March 7, 2025.



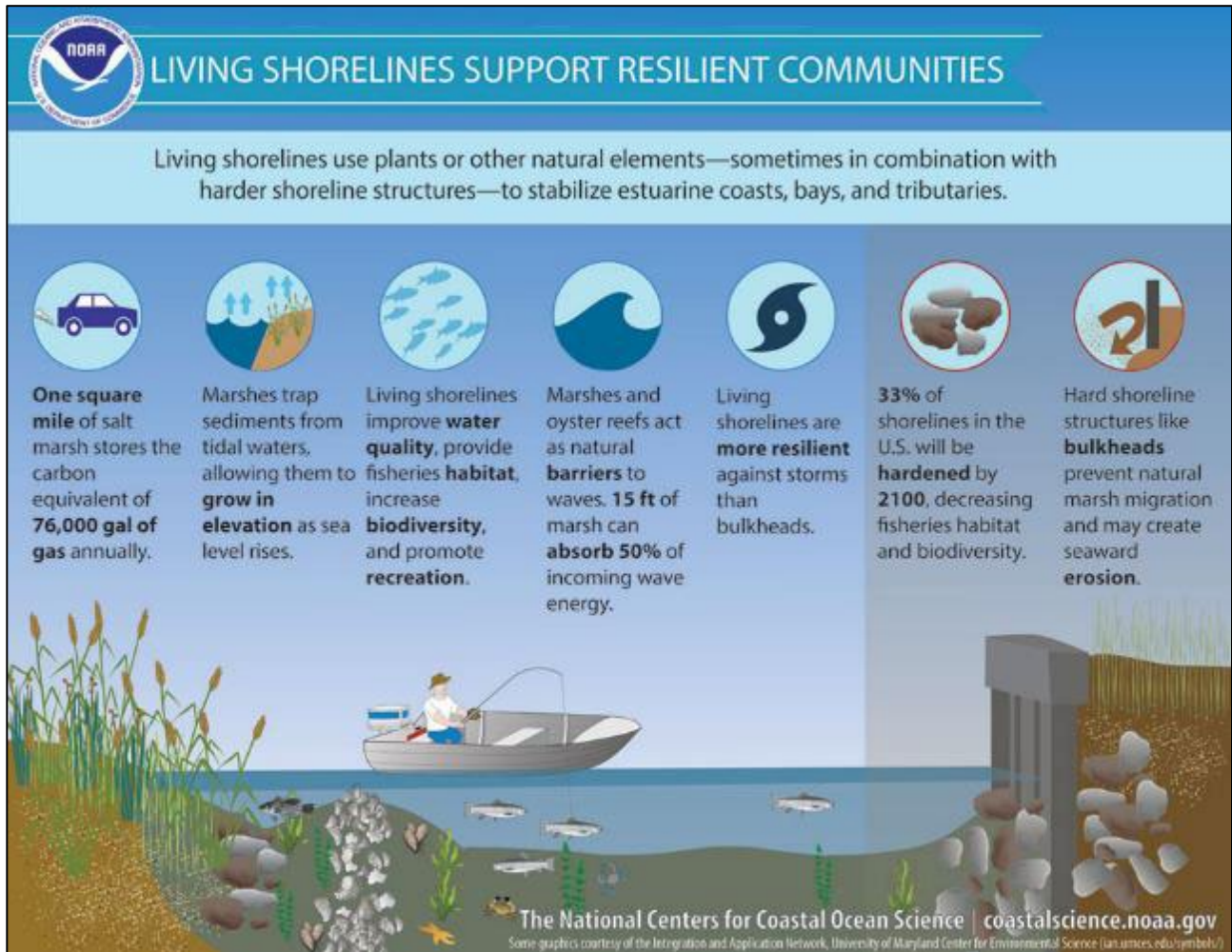


Figure 8. NOAA's Living Shorelines.

## WATER SOVEREIGNTY

Water is a vital resource for our Tribe, deeply intertwined with our cultural heritage, health, and sovereignty. The Tribe's connection to water is not only practical but also spiritual, as it sustains our traditional practices, food systems, and intergenerational well-being. However, climate change poses significant threats to water availability and quality, including reduced precipitation, increased drought frequency, and saltwater intrusion into freshwater sources. These challenges necessitate a proactive and holistic approach to water management that honors our ancestors and aligns with the Tribe's values of stewardship and resilience.

Our commitment to water sovereignty and resilience is essential for ensuring the health and safety of Tribal citizens, preserving cultural practices, and maintaining ecological balance. By integrating traditional knowledge with modern strategies, the Tribe can enhance its resilience to climate impacts while upholding its sovereignty over water resources. Restoring the water cycle through regenerative water and land management is essential. Securing land tenure rights for our Tribe is crucial for effective water and land stewardship. There are numerous recommendations that promote climate resilience in relation to water sovereignty and stewardship. They include gaining Tribal control over water resources, utilizing traditional knowledge for water management, restoring coastal ecosystems, developing community-based monitoring programs, building partnerships with government agencies, and advocating for policy changes that recognize and uphold Tribal water rights, all while focusing on culturally relevant practices to protect our water sources and traditional ways of life.

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*"Always tie your  
canoe to a tree."*

Nellie Younker (Appendix A)

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### Secure and Protect Our Water Resources

Secure our water resources while protecting our water systems to ensure that our descendants have the necessary resources to survive and thrive. We intend to develop a comprehensive approach to water management, respecting the interconnectedness of water and the Coquille People.

#### 1. Planning and Policy

- a. Develop a drinking water management plan for the Tribe.
  - i. Work with the North Bend Coos Bay Area Water Board to identify collaborative opportunities for coastal resilience projects that protect water sources.
- b. Secure water rights
  - i. Obtain water rights for Kilkich, 4th Creek, Tarheel, and other Tribal lands, reducing dependence on external providers and strengthening self-determination.
- c. Develop a sea level rise plan for the Mill Casino and local critical infrastructure.
  - i. Track sea level rise studies and adapt plans as needed.
  - ii. Collaborate with neighboring communities and the State of Oregon to develop a comprehensive sea level rise strategy that protects Tribal interests.
  - iii. Consider alternative sewage treatment for emergency management, such as composting toilets, to address vulnerabilities in existing wastewater treatment.

#### 2. Increase Capacity

- a. Partnerships: Academics (technical expertise, data analyses)
- b. Partnerships with state, counties, and municipalities on sea level rise strategies

- c. Workforce Training: Water Management, Climate Science, Water Rights

### **Develop and Maintain Resilient Water Delivery and Storage Infrastructure**

Develop and implement plans for larger water storage, including rainwater collection and diversion systems, to provide appropriate storage on Tribal lands.

1. Water Storage: Design and develop water storage at Kilkich.
  - a. Install rainwater catchment, filtration, and storage systems to support emergency water needs for up to four hundred people for three weeks. Consider installing hand-pump groundwater wells.
2. Implement micro-hydro turbines in water systems to improve energy efficiency and ensure continuous power supply during power outages.
3. Complete routine maintenance of drinking water equipment
4. Stage water supplies in preparation for emergencies.

### **Protect Our Water Sources and Be Good Stewards of Our Waters**

1. Green infrastructure: Consider installing rain gardens, green roofs, and swales at Tribal properties to manage stormwater runoff and enhance the natural water cycle.
2. Water conservation: Consider implementing public education campaigns, offering incentives for installing water-efficient appliances and fixtures, and adopting policies that promote responsible water use.
3. Monitoring: Community-led water quality and quantity monitoring programs can center traditional ecological knowledge, encouraging Tribal citizens to actively participate in water resource management.
  - a. Develop a Coquille-led citizen science program that allows Tribal citizens to report observations related to water quality, such as potential harmful algal blooms, fish kills, or unusual changes in water flow or appearance.
  - b. Increase flow monitoring in tributaries that are important for drinking water and fish to better understand changes.
  - c. Develop early warning systems for harmful algal blooms.

### **Additional Water Recommendations and Actions**

1. **Tribal Health:** Ensuring access to safe drinking water is fundamental to the health and well-being of all Tribal citizens. Water sovereignty initiatives prioritize the protection of water quality and the availability of potable water, particularly during emergencies, to prevent waterborne illnesses and promote community health and well-being.
2. **Intergenerational Connection:** Water stewardship is a shared responsibility that connects generations. By involving elders and youth in water management programs, the Tribe fosters the transmission of traditional knowledge and ensures the continuity of cultural practices related to water.
3. **Traditional Knowledge and Stories:** We recognize the invaluable wisdom embedded in our traditional ecological knowledge. Integrating TEK into water management strategies honors the legacy of our ancestors and ensures that decisions are informed by a deep understanding of the natural world.
4. **Cultural Heritage:** Water is an integral part of our cultural heritage. By documenting and sharing traditional water stewardship practices through community educational initiatives, the Tribe ensures that these practices are honored, protected, and passed on to future generations.







## FOOD SOVEREIGNTY

Traditional foods are central to Coquille identity, health, and resilience (Wittman 2023). Historically, the Tribe was self-reliant, thriving through intertribal trade and sustainable harvesting; we followed the spirit of potlatch in the footsteps of our ancestors. Today, climate change and the consumption of processed foods threaten food security and health. Reclaiming TEK and strengthening food systems are key to adapting to climate change, promoting economic independence, and ensuring a healthy, sustainable future.

Our food traditions are central to our culture, allowing us to connect with our ancestors. Focusing on food sovereignty is a critical way to strengthen our economy and community while protecting physical and mental health as climate impacts accelerate. In addition, a vibrant local food system will enable our community to adapt while contributing to the solution of the climate crisis.<sup>16, 17</sup> The following climate action strategies will continue building the resilience of the Coquille People in a changing world.

### Build a Local Food System

Build a local food system that combines ancestral foraging and farming practices with modern agricultural technology, allowing us to feed our people on our own terms.

#### 1. Develop an Indigenous Food Processing Facility.

- a. Construct the Kō-Kwel Indigenous Foods Security facility for cleaning, processing, storage, and preservation of traditional foods for ceremonial, cultural, and nutritional purposes.
- b. Maintain stores of preserved foods sufficient for three weeks subsistence.
- c. Establish emergency food harvesting and distribution strategies to ensure food access.

#### 2. Develop a Tribal Food Production and Delivery System.

- a. Consider installing Community garden beds with traditional food plants, when appropriate.
- b. Include Indigenous food plants in landscaping at Tribal facilities.
- c. Develop a community composting system to locally produce safe soil.<sup>18, 19</sup>
- d. Ensure continued access to traditional resources and harvest areas.
- e. Create indigenized Community Supported Agriculture (CSA) boxes that include harvested and farmed foods, as well as traditional food medicines.
- f. Provide educational incentives for learning sustainable agriculture practices (e.g., agroforestry, regenerative agriculture, and Indigenous farming systems).

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*“Leave some for others: The story is told that when one of our grandmothers went out fishing, she came home several hours later with only one fish. When asked why she only brought back one, she said it was because that is all she needed. She said, “always leave some for others.”*

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Anne Niblett (Appendix A)

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<sup>16</sup> Project Drawdown. 2025. Available at: <https://drawdown.org/sectors/food-agriculture-land-use>.

<sup>17</sup> Regeneration. 2025. Available at <https://regeneration.org/nexus/indigenous-sovereignty>.

<sup>18</sup> Regeneration. 2025. [Compost](#). Accessed on 3/7/2025.

<sup>19</sup> Beam Compost. 2025. [BEAM + Intensive Rotational Grazing](#). Accessed on 3/7/2025.



- g. Prioritize purchasing foods that are produced in ways that reduce chemical use and sequester carbon, promoting regenerative practices.
- h. Evaluate and consider creating a Tribal grocery/market in Kilkich to help localize the food supply chain.
- i. Develop a Tribal Food Sovereignty and Agriculture Department.
- j. Develop a Tribal farm in a location with manageable climate risks.

## Strengthen Traditional Foods, Culture, and Knowledge

Expand education about gathering, processing, and preserving traditional foods by creating reference materials, lesson plans, and classes that utilize Coquille languages.

### 1. Education

- a. Develop intergenerational classes and lesson plans on how to gather and process traditional foods safely, promote culture, and learn more about what constitutes a healthy diet.
- b. Engage youth and community in traditional ways that transmit critical cultural knowledge and promote food sovereignty career pathways.
- c. Implement non-lead hunting education with established curricula from the non-lead hunting partnership.

### 2. Develop Guidebooks and Locally Relevant Resources.

- a. Establish a library of resources on gathering, harvesting, and preservation, such as those identified in the [Traditional Foods Resource Guide](#).
- b. Develop foraging guidebooks that include identification guides, safety guidelines, and maps for edible plant foods.

### 3. Document Cultural Knowledge and Language

- a. Document oral history about traditional foodways.
- b. Promote the use of our traditional languages in the context of foodways, helping to preserve cultural identity and intergenerational knowledge transfer.



Figure 9. Six Pillars of Food Sovereignty.<sup>20</sup>

<sup>20</sup> Wittman, H. 2023. [Food sovereignty: An inclusive model for feeding the world and cooling the planet](#). One Earth 6 (5). pp 474-478.

## Lean into Food Stewardship

The Tribe is enhancing the local capacity to monitor, restore, and protect traditional foods and habitats. Climate impacts threaten culturally significant plants and animals, requiring data-driven conservation strategies. However, data on the health and abundance of traditional foods is often not available for culturally important species, which would be important for adaptive approaches to management and planning, policy suggestions, and the protection of Tribal treaty rights. The following climate action strategies will allow the Tribe to continue pursuing Indigenous Food Stewardship through conservation, management, and ecosystem restoration.

### 1. Monitoring for Adaptive Management and Planning

- a. Monitor traditional foods.
- b. Monitor emerging wildlife diseases to protect public health.
- c. Develop citizen science-based monitoring protocols to document observations, using systems such as the [Local Environmental Observer protocol](#).

### 2. Consultation and Partnerships: Support Indigenous foods through partnerships and consultation, prioritizing species at greatest risk due to climate change.

- a. Prioritize co-management opportunities with public land managers that favor elk and deer habitat.
- b. Co-manage berry, salal, and oak habitat.
- c. Partner with local, Tribal, state, and federal entities to identify, protect, manage, and/or restore ecosystems that support culturally important foods.

### 3. Restoration and Management: The conservation, management, and restoration of traditional food and medicinal plants, along with cultural stewardship practices, will lead to improved outcomes for fish, wildlife, and plants in the future.

- a. Protect habitats and processes that support traditional plant foods.
- b. Establish a seed bank of native and locally adapted seeds to use for restoration and food production.
- c. Take action to protect native pollinators.
- d. Steward and expand elk and deer habitat on Tribal properties.
- e. Reduce elk and deer traffic collisions.
- f. Protect oak seedlings from browsing.
- g. Create a native plant nursery.
- h. Restore and maintain tule, wapato, and camas wetlands.
- i. Use cultural fire to support cultural foods.
- j. Conduct invasive species management (e.g., monitoring, prevention, control, education, and outreach) to limit competition with important food sources.





## WILDFIRE STEWARDSHIP

Rising temperatures, prolonged dry seasons, and changes in precipitation and fog patterns are increasing the frequency, severity, and acreage burned by wildfires. Stronger windstorms further escalate risks by spreading flames and damaging power infrastructure. Decades of fire suppression and the loss of Indigenous fire practices have led to the development of dense, fire-prone forests, which in turn reduce ecosystem resilience.

Restoring Cultural Fire Practices<sup>21</sup>, adopting targeted grazing,<sup>22, 23</sup> and leveraging emerging fire management technologies can mitigate wildfire threats. The Coquille Tribe is committed to protecting Tribal assets, human health and safety, and traditional food sources through proactive efforts that may include wildfire planning, community education, and strategic forest management.

### Reduce Risks to Tribal Assets

Reduce the risk of wildfire and minimize its impact on Tribal assets, including housing and enterprises.

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*“Leave it better than  
you found it.”*

Coquille Climate Resilience  
Task Force (Appendix A)

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#### 1. Planning and Policy

- a. Collaborate with the Charleston Fire Department and the Oregon State Fire Marshal’s Defensible Space Initiative to assess wildfire risks at Kilkich and for those who live off-reservation.<sup>24</sup>
- b. Support Kilkich residents in forming a disaster preparedness group, providing education and information to help residents develop personal evacuation and communication plans.
- c. Develop Firewise Community training on defensible space, home hardening, and air quality protection.
- d. Conduct community-wide evacuation and emergency drills.
- e. Ensure that redundant emergency alert systems are in place.

#### 2. Vegetation Management

- a. Implement vegetation management practices that create defensible space in accordance with Firewise Guidance<sup>25</sup> and the OR Fire Marshal (Figure 8).
- b. Implement fire-resistant landscaping practices.<sup>26</sup>
- c. Organize brush-clearing events with youth programs and volunteer groups.
- d. Maintain firebreaks and remove ladder fuels that threaten timber and homes.
- e. Explore grazing partnerships for targeted fuel reduction.
- f. Eliminate invasive, flammable species, such as Scotch broom and gorse.

#### 3. Fire Detection

- a. Invest in wildfire alert cameras, the [Alert Wildfire System](#), and smoke detection systems to provide early warnings.
- b. Train and equip volunteer fire response teams.

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<sup>21</sup> Fire Networks. 2025. Indigenous Peoples Burning Network. Available at: <https://firenetworks.org/ipbn>.

<sup>22</sup> Match.Graze. 2025. California Grazing Exchange. Available at: <https://matchgraze.com>.

<sup>23</sup> Regeneration. 2025 Fire Ecology. Available at: <https://regeneration.org/nexus/fire-ecology>

<sup>24</sup> OR State Fire Marshal. 2025. [Defensible Space. Plan Today. Protect Tomorrow](#). Accessed 3/7/2025.

<sup>25</sup> Estes Valley Fire District. 2025. [Living in the WUI \(Wildland Urban Interface\)](#). Accessed 3/7/2025.

<sup>26</sup> OSU Extension. 2025. [Fire-resistant plants for home landscapes](#). Accessed 3/7/2025.



#### 4. Fire-Resilient Infrastructure

- a. Implement fire-resistant retrofits such as fire-resistant windows and roofing materials, vent and chimney covers, and external sprinkler systems.<sup>27</sup>
- b. Use noncombustible building materials and fire-resistant designs in new construction.<sup>28</sup>
- c. Collaborate with Pacific Power and Coos-Curry Electric Cooperative to fire-harden electrical systems.<sup>29</sup>
- d. Require higher standards for fire-hardening of power lines on Tribal land, such as using alternative materials for power poles, covered conductors to eliminate “slap arcing” and vegetation contact, and aluminum conductor steel-reinforced wire.<sup>30,31</sup>

#### 5. Emergency Response and Disaster Resiliency (see Tribe’s 2025 Hazard Mitigation Plan for more detail)

- a. Develop a disaster resiliency hub for emergency shelter, water storage, and air quality protection.
  - i. Include battery backup and food stores for four hundred people for three weeks.
  - ii. Consider installing an off-grid waste and wastewater disposal system.
  - iii. Develop viable evacuation routes to the east of Kilkich.
  - iv. Consider ocean-based evacuation options to overcome the logistical challenges of overland travel.
  - v. Improve evacuation plans for vulnerable residents.

#### Promote Fire-Resilient Forests

Indigenous fire stewardship historically maintained diverse, healthy forests. The Tribe aims to revive traditional fire use while incorporating modern forestry practices to enhance forest resilience and biodiversity.

##### 1. Forest Management Strategies

- a. Support cultural burning and prescribed fire to reduce fuel loads and restore traditional food sources.
- b. Promote fire-resistant forests through thinning, surface fuel reduction, and selective harvesting.
- c. Control invasive, highly flammable plant species.
- d. Collaborate with federal and state agencies to shape land management policies that impact Tribal lands.

##### 2. Carbon and Climate Solutions

- a. Utilize biochar from forestry waste to sequester carbon and enrich soil.
- b. Support research on climate-resilient tree species and genetic diversity in reforestation.

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<sup>27</sup> Center for Climate and Energy Solutions. 2025. [Resilience Strategies for Wildfire](#). Accessed 3/7/2025.

<sup>28</sup> Wildfire Risk to Communities. 2025. [Available at this link](#).

<sup>29</sup> State of Oregon. 2025. [Senate Bill 762](#)

<sup>30</sup> CALFire. 2021. California Power Line Fire Prevention Field Guide. [Available at this link](#).

<sup>31</sup> OR PUC. 2022. [Wildfire and the Oregon Electricity System](#).



- c. Strengthening participation in federal wildfire resilience programs, such as the Coos Fire Protective Agency (CFPA), USFS Wildfire Crisis Strategy and the BLM Conservation and Landscape Health Rule.

By combining traditional ecological knowledge (TEK), modern science, and strategic partnerships, the Coquille Tribe will mitigate wildfire risks, restore forest health, and safeguard Tribal resources for future generations.

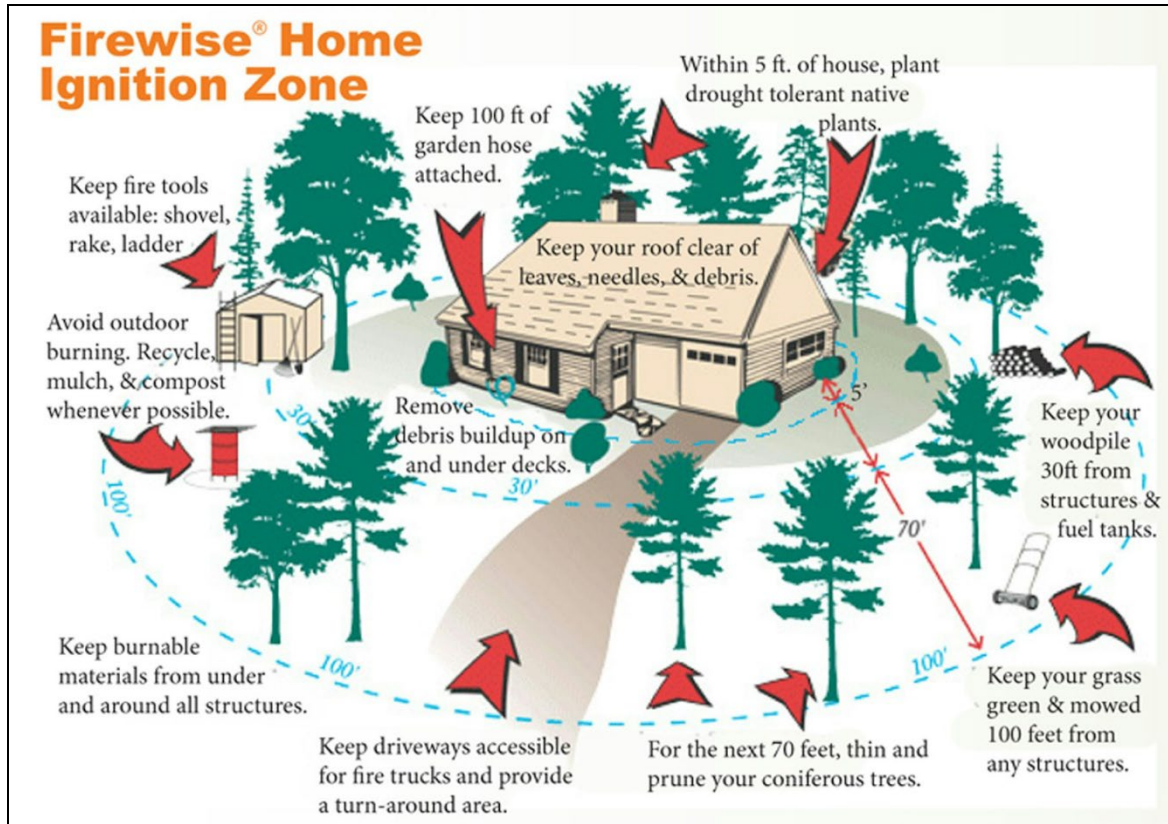


Figure 10. Guidance for Reducing Home Ignition Zones Using Firewise Principles. <sup>19</sup>

## RIVER, ESTUARY, AND OCEAN STEWARDSHIP

The Coquille People have relied on marine first foods since time immemorial. However, climate change, pollution, and harmful management practices threaten ocean health. Ocean acidification, hypoxia, marine heatwaves, and habitat loss are reducing key species like abalone, oysters, salmon, and kelp. Bioaccumulated toxins further endanger Tribal subsistence.

The Coquille Tribe recognizes that restoring balance to the ocean requires local, national, and global collaboration and we intend to continue stewarding our marine ecosystems through direct action, policy, and applying TEK.

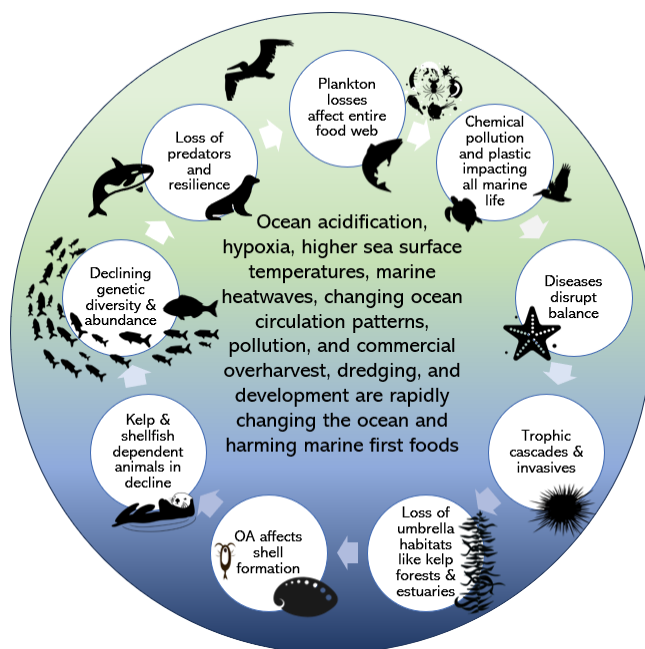
### Strengthen Tribal Capacity and Partnerships

1. Consider hiring marine specialists to support the Tribe's ocean management goals.
2. Expand community engagement in marine conservation through education, restoration events, and beach clean-ups.
3. Evaluate and consider developing a Tribal marine monitoring program and partnerships to track ecosystem health, including harmful algal blooms and paralytic shellfish toxins.
4. Consider partnering with initiatives such as the Oregon Kelp Alliance and the [Phytoplankton Monitoring Network](#).
5. Consider Tribal-led aquaculture projects to protect shellfish populations from ocean acidification.
6. Participate in regional coastal planning and collaborative estuary restoration efforts.

## A Coquille Story: Our Ocean; Our Culture

*We had an ocean of trees; these kelp "trees" lessened the impact of waves beating against our shoreline. Our canoes crossed a kelp highway filled with first foods to sustain us as we travelled from village to village. These kelp forests dampened wave energy and created a refuge for marine life. Kelp forests are the sequoias of our ocean landscape. Kelp stores carbon much like the sequoias on land. They photosynthesize oxygen into our atmosphere and reduce the acidification that kills our clams, crab, and sea creatures. Red and white abalone thrive in kelp forests. Ocean acidification and warmer than normal ocean water in the Pacific Ocean have brought a die-off of Sea Stars. Our sea stars that are voracious eaters of sea urchins, are dying. Purple sea urchins are voraciously eating our kelp and killing our red abalone. Red abalone has declined to a point where we cannot harvest them. The downward decline is continuing due to purple sea urchin infestations and barrens. White abalone are close to extinction. If kelp is our sequoia, eelgrass is our meadow. Our estuary has a unique resident; a flowering plant that hosts spawning grounds for Pacific herring, crabs, octopus, shrimp, clams, abalone, and invertebrates. We must save both kelp and eelgrass to save our first foods.*

Shelley Estes, Mark Healy, and Anne Niblett





## Reduce Harmful Impacts

1. Try minimizing the use of single-use plastics, microplastics, and harmful chemicals in Tribal operations.<sup>32</sup>
2. Prioritize ocean-safe products for Tribal operations and enterprises.<sup>33</sup>

## Promote Sustainable Seafood Practices

1. Integrate marine first foods into Tribal gatherings and support sustainable local fisheries.

## Restore Kelp Forests and Eelgrass Meadows

1. Support kelp and eelgrass restoration, as well as the control of urchin and green crab populations, to enhance biodiversity, protect shorelines, and improve water quality.
2. Remove pollutants, invasive species, and sediment runoff impacting seagrass.

## Expand or Create Tribal Marine Protected Areas (MPAs) and Blue Carbon Initiatives

1. Advocate for new Tribal MPAs to protect marine life and enhance carbon sequestration (Figure 10).
2. Explore “sea-forestation,” shellfish hatcheries, and sustainable ocean economies.

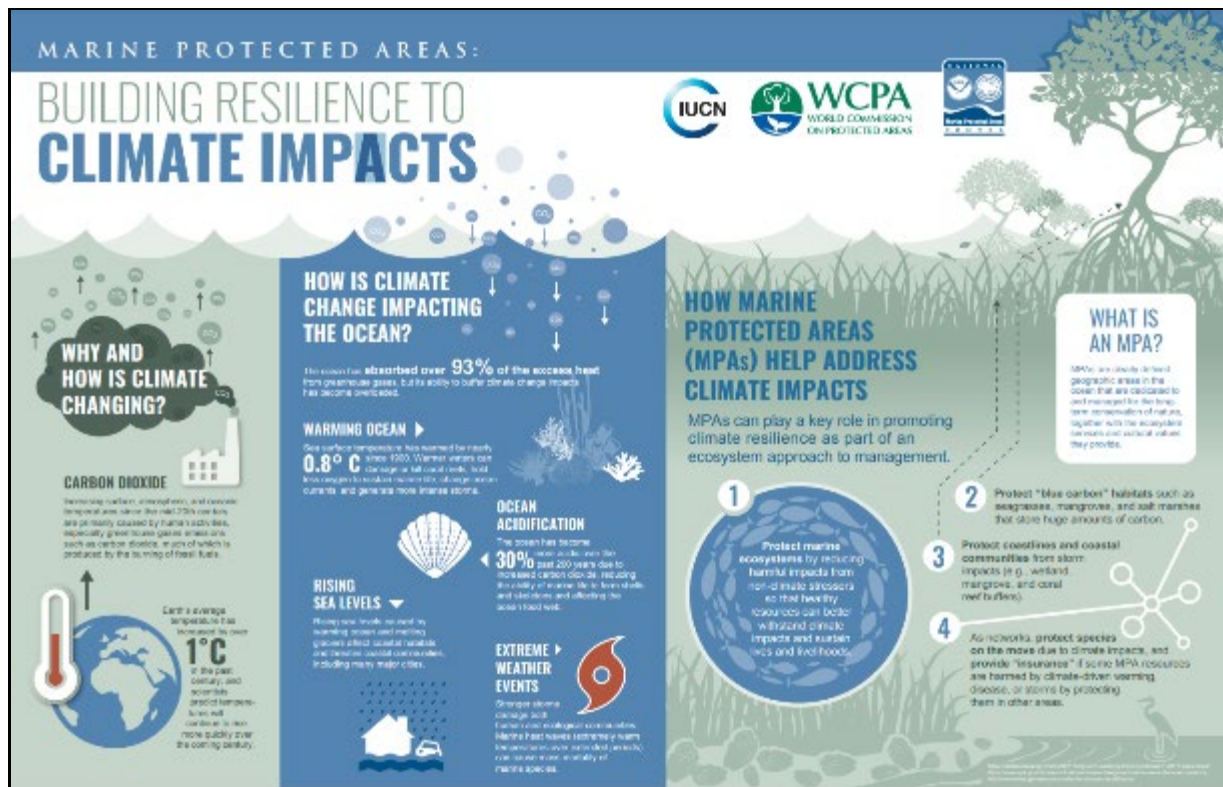


Figure 11. How Tribal Marine Protected Areas Help Build Resilience to Climate Impacts.

<sup>32</sup> Resilient Coasts for Salmon. 2025. [Reduce Microplastics pollution from your laundry](#). Accessed 3/7/2025.

<sup>33</sup> Resilient Coasts for Salmon. 2025. [Pesticides to Avoid](#). Accessed 3/7/2025.

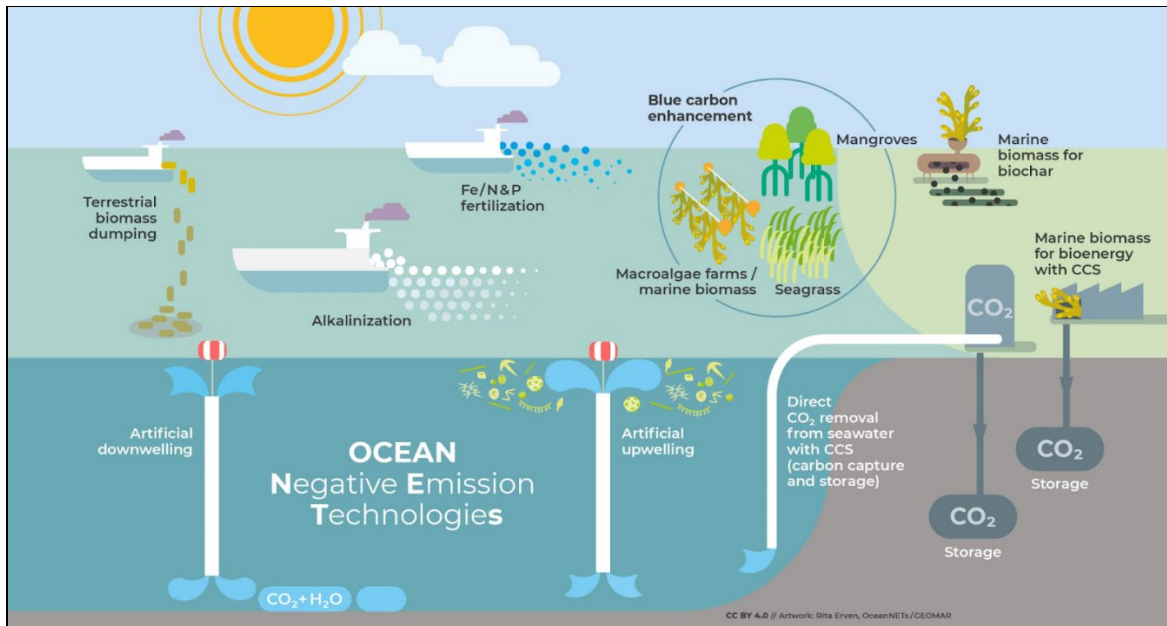


Figure 12. Concepts for large-scale, ocean-based negative CO<sub>2</sub> technologies that could achieve climate neutrality and that have the greatest potential to help with CO<sub>2</sub> mitigation, environmental impact, risks, co-benefits, technical feasibility, cost-effectiveness, and political and societal acceptance.<sup>34</sup>



Figure 13. Ten ways to help our ocean.<sup>35</sup>

<sup>34</sup> OceanNets. 2025. [Ocean-based Negative Emission Technologies](#). Accessed on 3/7/2025.

<sup>35</sup> NOAA. 2025. [How can you help our Ocean?](#) Accessed 3/7/2025.

## POLLUTION REDUCTION STRATEGIES

The Tribe has a “no waste” policy that employs a balanced approach to “Leave it better than we found it” by adhering to the 5R’s: Refuse, Reduce, Reuse, Recycle, and Repurpose. Energy conservation in the transportation sector and the built environment is briefly mentioned here, but it is expanded upon in the Energy Sovereignty section, which includes comprehensive pollution reduction strategies for the energy sector.

Recycling plays a role in combating climate change by reducing waste and conserving raw materials. [Project Drawdown](#) estimates that recycling from 2020 to 2050 could cut carbon emissions by up to 6 gigatons, equivalent to removing over a billion cars from the road for a year. Recycling also conserves energy, with aluminum recycling saving up to 95% of the energy required to produce new cans.<sup>36</sup>

Upcycling retains or improves material quality, while downcycling repurposes materials but weakens them over time. Some materials, such as plastic bags, electronics, and Styrofoam, are difficult to recycle and often end up in landfills, contributing to environmental harm. Waste disposal, especially organic, inorganic, and plastic waste, generates greenhouse gases.<sup>37</sup>

Project Drawdown ranks reducing food waste among the top three solutions for reversing carbon buildup, while composting ranks lower, between #57 and #62, depending on climate goals. Although composting organic waste instead of sending it to landfills can cut greenhouse gas emissions by over 50%, it ranks lower because its full benefits, such as enriching soil and acting as a carbon sink, are not fully accounted for in the analysis. Compost improves soil health, supports plant growth, and contributes to multiple climate solutions, including green roofs and conservation agriculture.

Forty percent of food produced never reaches consumers, with significant losses occurring across the supply chain. Developed countries generate the most food waste, with the U.S. accounting for approximately ninety-two billion pounds annually, with over half of this waste originating from the food industry. Since food waste happens at all stages, there are many opportunities to reduce it.<sup>37</sup>

The Climate Resilience Task Force and community identified the following actions to reduce the Tribe’s carbon footprint in accordance with its no-waste policy, helping the Tribe identify balanced and impactful options to reduce environmental pollution.

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*“Use all of the resource: When an animal is harvested, all parts of it are used as a sign of respect for the life it gave for your benefit. Today, we often refer to this as our “No waste policy” within the Tribe that affects how we co-manage with the State of Oregon.”*

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Anne Niblett (Appendix A)

### Measure the Tribe’s Climate Footprint

1. Evaluate and measure the Tribe’s carbon footprint and ways to reduce it.

### Expand the Tribe’s “no waste” policy.

Reduce waste, increase recycling, and encourage reusing materials in the following ways:

1. Consider policies for Tribal businesses and gatherings to reduce environmental impact.

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<sup>36</sup> Project Drawdown. 2025. [Recycling](#). Accessed on 3/7/2025.

<sup>37</sup> Project Regenerate. 2025. [Waste Nothing](#). Accessed 3/7/2025.



2. Include reuse, reduce, and recycling options at Tribal events, facilities, and enterprises.
3. Reduce the use of single-use items within Tribal operations when feasible.
4. Encourage the use of compostable and biodegradable serving items or durable, reusable serving items when feasible
5. Encourage the use of event decor items made from durable, earth-friendly materials that can be reused.
6. Consider implementing earth-friendly practices at the Mill Casino Hotel and RV Park, which could include transitioning from single-use to multi-use bathroom products, using durable dishes and cutlery, utilizing earth-friendly containers, encouraging guests to reuse linens and towels, selecting natural and biodegradable cleaning products, promoting sustainability in the gift shop, and providing water refill stations.
7. Place recycling containers in prominent and convenient locations and enhance recycling proficiency by using educational signs.
8. Educate outside vendors about the Tribe's environmental practices, green policies, and green solutions prior to events.
9. Identify opportunities to divert food waste from landfills, such as composting and using food waste for animal feed.

### **Infrastructure and transportation climate pollution reduction strategies**

The following strategies could help the Tribe to reduce pollution, so they are mentioned briefly here. The Energy Sovereignty Section includes a comprehensive overview of these strategies.

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*"Respect your environment and the resources that you rely on."*

Chief Jason Younker (Appendix A)

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1. Identify opportunities to reduce the carbon footprint of existing buildings through energy efficiency measures and the adoption of renewable energy sources.
2. Explore opportunities to install electric vehicle charging stations at Tribal offices, enterprises, and housing facilities.
3. Identify steps and funding to transition the Tribe's fleet to greener vehicles, such as plug-in hybrids and electric vehicles.
4. Develop and implement fire-resilient and sustainable building guidelines for new Tribal buildings and retrofits. Constructing buildings with sustainable materials that use less energy to build and operate will help us reduce climate pollution. Prioritizing fire-resilient buildings will reduce pollution because the materials and energy used in construction will be less likely to be lost due to extreme events such as wildfires.
5. The following building practices, mentioned in other strategies, are also important for reducing climate pollution. Rainwater harvesting, green rooftops, integrating recycling, reuse, and composting facilities into building designs, solar-ready buildings, water recycling systems, composting toilets, and redundant heating and cooling systems that allow buildings to be off-grid during emergencies are a priority for the Tribe because they increase our resilience and reduce waste and pollution.



## CROSS-CUTTING ACTIONS

Many of the recommended Tribal Resilience Actions cut across sectors and include:

**Investing in Workforce Capacity and Education:** Investing in workforce capacity and education equips Tribal citizens to lead climate resilience efforts. Educational opportunities that strengthen cultural heritage, food sovereignty, and resource stewardship will empower future generations. Workforce development programs, including scholarships, stipends, housing, and training, will help cultivate experts to restore habitats, adapt to change, fight wildfires, build infrastructure, produce food, and advocate for Tribal interests.

**Land Acquisition and Sovereignty:** Land tenure is essential for self-determination, allowing the Tribe to protect water, maintain traditional food sources, and practice sustainable agriculture. This strengthens food security and ensures long-term climate resilience.

**Resilient Infrastructure Investments:** The Tribe will evaluate the costs and benefits of resilience actions to protect infrastructure and support future growth. Strategic investments in housing, enterprises, and resources will strengthen long-term resilience and sustainability.

**Preparedness for Extreme Events:** The Tribe will continue to prioritize preparedness for extreme events and consider options for increased redundancy and resiliency in water, food, energy, and transportation infrastructure.

**Strengthening Sovereignty:** Water, food, energy, and land sovereignty are essential to Tribal resilience, cultural heritage, and well-being. The climate is threatening these resources, necessitating a proactive, holistic approach that combines TEK with modern strategies.

**Community-Based Management:** The Tribe will develop monitoring programs to track traditional resources and protect Treaty Rights and resources. By assessing the health of ecosystems and the effects of climate change on traditional foods, and by developing adaptation strategies that involve both youth and the elderly, the Tribe will strengthen community-based management and cultural continuity.

**Ecosystem Restoration:** The Tribe will prioritize restoring coastal wetlands, seagrass beds, and critical habitats to protect communities and support ecosystems. Reforestation efforts will enhance water quality, mitigate erosion, and protect riverine and estuarine habitats, ultimately benefiting salmon, native wildlife, and biodiversity. Restoring natural fire regimes will enhance forest resilience, safeguarding traditional foods and wildlife.

**Policy Advocacy:** The Tribe will strengthen its capacity to advocate for federal and state policies that protect Tribal rights to water, food, and energy. This includes engaging with regulatory agencies on resource allocation and permitting while equipping Tribal staff and legal counsel to defend the Tribe's interests in mitigation and restoration projects.

**Responsible Consumption:** Developing circular economies minimizes waste through the five R's: Refuse, Reduce, Reuse, Recycle, and Repurpose. This includes phasing out fossil fuels, toxins, and unsustainable products. Actions throughout the plan align with this core value, with specific community-sourced initiatives outlined in the Pollution Reduction section.

**Cultural Preservation:** Continuing to integrate traditional knowledge and cultural practices into water, land, and ocean management strategies, including the use of ceremonial first foods and stewardship practices, is a key priority for the Tribe. Our culture and community are the foundation of our resilience and survival today, as it has always been. Documenting and sharing traditional knowledge through community-based education initiatives, as we have always done, will continue to strengthen our community.





# CONCLUSION: CONTINUING OUR RESILIENCE JOURNEY

The Coquille Indian Tribe has always embodied strength, adaptability, and deep-rooted stewardship of our ancestral lands and waters. This Resilience Management Plan reflects our enduring commitment to ensuring a thriving, sovereign future for our people in the face of climate uncertainty. Grounded in the wisdom of our ancestors and guided by contemporary science and planning, this document is a blueprint for self-determined action, resilience, and hope.

Through this plan, we have laid out clear priorities: economic sovereignty, resilient infrastructure, water and food sovereignty, healthy ecosystems, pollution reduction, energy sovereignty, and a range of cross-cutting actions that include many benefits. Each of these areas is informed by community input, Tribal values, traditional ecological knowledge, and a forward-looking strategy that integrates climate resilience into every facet of Tribal life. Our stories, such as the one about weaving long ropes to withstand the great tide, remind us that preparation is not just practical; it is sacred. It is our responsibility to heed the warnings, to act with foresight, and to care for all that sustains us.

Yet, we recognize that this is only the beginning. Environmental change is a dynamic and evolving challenge. This plan, like the people it serves, is a living document—meant to be revisited, expanded, and revised as new knowledge, partnerships, and opportunities arise. As we consider and implement the actions outlined here, we will continue to collaborate with other Tribes, governments, scientists, and community members, ensuring our work benefits not only our own people but also the larger region and planet.

Above all, this plan is an affirmation of the Coquille Indian Tribe's enduring sovereignty and resilience. By leading with our values and investing in the strength of our people, we ensure that our homelands, cultures, and ways of life are protected—not only for today but for the generations yet to come. As we move forward, we do so with purpose, unity, and always with a good heart. Always striving to leave it better than we found it.

