



E. Energy Use and Production

Contemporary life is based on fossil fuel energy and other “renewable” energies that also have some environmental cost. Examining impacts to energy production, transmission, and end use, as well as their effects on First Foods and the food system reveal where supplementary or alternative energy supply options could be valuable for tribal communities.

CTUIR Departments that are involved with managing energy:

- **Department of Natural Resources (DNR)** manages the Energy and Environmental Science Program (EESP), which has a wide array of responsibilities that include the growth and pursuit of renewable energy projects to diversify energy production opportunities on the UIR, a chemical laboratory that is able to test for a [number of different contaminants and attributes], a restoration project for the Hanford Nuclear Reservation that is within CTUIR ceded lands, and air quality monitoring and modeling for CTUIR ceded lands and for the Umatilla Indian Reservation (UIR). This program also facilitates the Energy Strategies Team that is coordinating energy production development for the tribe, along with the TPO, DECD, and outside entities like the Energy Trust of Oregon and Wenaha Consulting Group. As part of the First Foods Mission, these energy projects always have an eye towards improving the resiliency of the tribe to power transmission interruptions and danger, and to mitigate any impact there may be towards First Foods habitat and access.
- **Department of Economic and Community Development (DECD)** works with tribal enterprises that could either transition to renewable energy, or could work to provide energy capacity to the tribe in some way in the future, and they also work with the Wildhorse Resort and Casino (WRC) that accounts for a large energy footprint of CTUIR, and potential for energy savings; DECD has also worked with natural gas companies with previous Yaka Energy experiences, with wind turbine power through the Rattlesnake Wind Farm in Arlington, and is currently participating with the CTUIR Energy Strategies Team to coordinate energy production and expansion for the tribe.
- **Department of Public Works, Department of Housing** both maintain tribal facilities and residences, and are involved in the up-keep and upgrades of HVAC and plumbing systems and could be seen as opportunities to assess and inventory the efficiency of CTUIR homes and facilities. Newer housing facilities being planned are more energy efficient than the previous structures that were there, as the Lucky 7 Mobile Home Park receives some upgrades to energy efficient appliances for homes being constructed in this site.
- **Tribal Planning Office (TPO)** is involved in creating zoning and code conditions that allow for the growth of renewable energy at small and midscale projects for family and community need, and are an active participant in the Energy Strategies Team. Permits and coordination of infrastructure upgrades and construction for tribal and residential needs, and growth of energy sufficiency as it has been mandated in the Comprehensive Plan (2010).
- **Office of Legal Counsel (OLC)** participate as senior partners with the Hanford Natural Resource Trustee Council and the Natural Resources Damage Assessment (NRDA) being conducted to determine the scope of damage and rehabilitation possible of the site; OLC also participates in Portland’s Millennium Coal Terminal Super Fund Site Clean Up as it impacts the mouth of the Columbia River and the migration of salmon to and from CTUIR river systems. These sites show the long legacy that energy projects have, and are a reminder about the unintended consequences of some forms of energy.
- **Board of Trustees (BOT)** provides guidance to state and national agencies on their energy production and infrastructure plans and impacts to First Foods through government-to-government consultation, and through their involvement in these projects.
- [Additional?]



E. Economics and Community

Monetary and social considerations are a realistic factor in planning efforts, and strengthening systems of cost and revenue that are rooted in social and environmental justice have a place in climate adaptation. Prevention and planning for uncertainty are the most cost-effective methods of preparing a community to face increasingly variable seasonal weather conditions. Human connections are what drive both economies and communities, and climate change is likely to impact both of these kinds of connection networks.

CTUIR Departments that are involved with managing development:

- **Department of Economic and Community Development (DECD)** is the primary department responsible for pursuing and expanding tribal economic opportunities and proactively works to increase revenue from various businesses and industries that might be looking to locate on the UIR; DECD also works with infrastructure upgrades like the broadband fiber optic cable installation, with community improvement initiatives like the Earth Day Clean Up event, and with Farm Enterprises, which has historically provided a source of stable revenue for the tribe in its early days as a sovereign government.

- **Economic and Community Development Committee (ECDC)** as an advisory committee provides direction and energy to DECD projects and liaises with the tribal community on their needs and vision for the future; many on the ECDC have worked with the tribe for several decades in different capacities, and know the history of the tribe’s economic development and survival through shifts in federal policy management of tribal nations. Land acquisition and alleviating of the UIR’s “checkerboard” existence is a highlighted priority of tribal elders who participate with ECDC and should be an important aspect of climate resilience.
- **Nixyaawii Community Financial Services (NCFS) and the Wildhorse Small Business Development Center (SBDC)** work with small tribal businesses and provide them support for improving their operations, growing their businesses or getting start ups off the ground; NCFS also works with the Education Department to facilitate financial literacy classes for students and families to help prepare tribal youth to make important savings and financing decisions in the future.
- **Tribal Planning Office (TPO)** is involved with permits for businesses in proper land use areas, and coordinates infrastructure upgrades and construction for tribal, industrial, residential needs that include those of current and future tribal enterprises; planning for community need and facilitating participation in tribal planning also connects the tribal community to long term planning.
- **Communications Department** connects the community through traditional and social media outlets and can spread important information quickly, which is very important during emergencies and public health crises in the acute short term, but also in the longer term as these communication channels can facilitate information between families and generations.
- **Department of Housing** is often involved when families on the UIR have need to evacuate in response to flooding or wildfire, and many times there will be follow up repair or rebuilding after the danger of the emergency has passed; at times needed repairs might cause families to be displaced for weeks to months depending on the damage.
- **Department of Public Safety** plans and operates reactive emergency response during crisis events and coordinates with other emergency services during this time; they also assist with evacuations and provide law enforcement where necessary.
- **Department of Child and Family Services (DCFS)** provides opportunities for training and support for families who have need, and operate as the point of contact for CTUIR’s Indian Tribal Organization (ITO) to the US Dept of Agriculture (USDA) and administers the FDPIR food distribution program; throughout the Covid-19 pandemic, DCFS has also been coordinating with other organizations to provide monthly food distribution events to get fresh and healthy food to residents of the UIR during this time.
- **Board of Trustees (BOT)** provides strong leadership in times of crisis and works to proactively address community and sovereignty needs in the region; as elected officials, these leadership positions are responsive to the tribal electorate and govern with current and future generational needs as a priority.
- [Additional?]

G. Sovereignty and Treaty Rights

Tribal nations that have the right to self-determination are in a unique position to demand social and environmental justice that will be part of climate change planning, and have the tools to enact standards and practices that impact the entire region around them. Tribal sovereignty and Land Back movements are the most efficient ways of preparing for climate adaptation, since returning power and resources to tribes will expand opportunities for indigenous land management and proper care for the landscape in a way that strengthens natural resilience.

CTUIR Departments that are involved with managing tribal self-determination:

- **Department of Natural Resources (DNR)** supports tribal sovereignty through the act of restoring First Foods habitat to a place where it can sustain and nourish these significant species, and requires working with many different state, federal, and private land jurisdictions to accomplish this. First Foods Excursions and educational opportunities provide education on treaty rights exercise knowledge often occur within the area of national forests, state and industry easement, and on private property where the landowner has reached an agreement with the tribe to provide for harvest opportunities.
- **Health Commission** exists as a regulatory commission to provide BOT and General Council guidance to Yellowhawk Tribal Health Center’s programs and operations, and engages with regulating and managing emerging and ongoing health crises and is accountable to the tribal community; the Health Commission consists of active BOT members, appointed commission members from the tribal community, and Yellowhawk administration staff.
- **Fish and Wildlife Commission (FWC)** is a regulatory commission that provides BOT and General Council guidance to DNR and other tribal departments that are involved with First Foods; as a regulatory entity, FWC sets First Foods seasonal harvest levels for the Umatilla and Walla Walla River basin fish populations as appropriate, and works with states and nations to expand treaty rights opportunities throughout the traditional use area. FWC is comprised of BOT members, appointed commission members from the tribal community, and are often attended by DNR staff.





- **Tribal Water Commission (TWC)** is a regulatory commission that provides BOT and General Council guidance to DNR, Public Works, TPO, and other departments that are involved with water on the reservation; TWC performs tribal sovereignty actions when it regulates water use on the UIR with the Water Code and provides guidance to state and federal water management agencies like state Water Resource Departments, legislatively-mandated partnerships/cooperatives, federal agencies like the Bureau of Reclamation and Army Corps of Engineers, among others.
- **CTUIR General Council** is the populist branch of tribal government and is a collective of all participating and voting tribal members; General Council Chair is part of the BOT, and the council provides a forum for the tribal community to give guidance and direction to tribal governance on any issue the tribe is facing.
- **Department of Public Works** maintains public infrastructure for a connected, accessible, and equitable distribution of tribal resources, for the community to stay connected with one another, and for tribal members to travel to locations where they are able to fully access their protected treaty rights within the CTUIR traditional use lands.
- **Yellowhawk Tribal Health Center** is the CTUIR Indian Health Service (HIS) clinic that proactively and reactively addresses health concerns for tribal members in a culturally appropriate way; healthcare services have been contracted by Yellowhawk as the tribe has demonstrated its capacity to administer these programs internally, and the Health Commission oversees the operations of Yellowhawk as a mechanism for keeping its work accountable to the tribal community.
- **Department of Child and Family Services (DCFS)** responds proactively by reaching out to families and operating programs and services that meet ongoing need, and reactively with food distribution and other assistance activities for the tribal community as is needed to keep a strong and connected tribal nation. DCFS also administers the Workforce Development program that provides opportunity for tribal members to access education and skills training, as well as for tribal youth that are interested in interning with different tribal departments to grow and learn about these professions.
- **Department of Education** builds the future of this tribal nation as it shapes and educates tribal youth to be future leaders for the tribe and for a better world; Education creates space and opportunity for tribal youth to learn Indigenous culture, science, arts, and governance essentials, and works with other programs to organize additional opportunities for youth to engage and learn about the world they are inheriting and creating. Within Education, the Tribal Language Program is working to preserve and revitalize CTUIR languages through online learning formats and classes for children and adults that are open to all who want to learn the original language of these lands.
- **Department of Human Resources** administers the TERO program which asserts tribal member enterprise priority on construction and industry work being conducted throughout the tribe's ceded lands, with a goal to expand revenue generating opportunities for tribal members in the region and build economic prosperity into tribal enterprises.
- **Finance Department** is responsible for maintaining fiscal solvency and responsibility for the tribe, through the administration of grant and agreement funds, working with contractors and vendors to ensure the tribe's capacity for the projects it is conducting, and reporting and auditing internal tribal resources to be reported to necessary entities.
- **Economic and Community Development Committee (ECDC)** is an advisory committee that provides BOT and General Council guidance to DECD, DNR, TPO, and other departments that participate with economic and community development projects within the reservation and tribal government; this committee is comprised of current and former BOT representatives, and appointed members of the tribal community.
- **Office of Legal Counsel (OLC)** engages with legal frameworks and channels that support tribal sovereignty, and monitor state and national proceedings that are of interest to CTUIR because they affect tribal sovereignty function, they impact traditional use and ceded lands, and/or because they have the potential to affect the way treaty rights are protected.
- **Land Protection and Planning [Commission] (LPCC)** is a [regulatory commission] that provides BOT and General Council guidance to the TPO, OLC, and other departments that are involved with land acquisition and long term land use planning, permitting and zoning needs and changes on the UIR, and other building and infrastructure issues for the tribe.
- **Tribal Planning Office (TPO)** works with the LPCC and other departments on setting and enforcing permitting and zoning requirements on the UIR as a function of the tribe's ability to assert sovereignty over itself and its lands.
- **Department of Public Safety** provides law enforcement, emergency assistance, case work and emergency preparedness capacity to the tribal nation with a goal of protecting individuals and creating structure for a cohesive community.
- **Tribal Court** exercises sovereignty within the tribe, as the Tribal Court has the jurisdiction to administer law and civil violation complaints over tribal members and matters on the UIR, though these powers are curtailed when it comes to non-tribal violator. This is an ongoing issue for tribal sovereignty and should be addressed to expand sovereignty jurisdiction.
- **Board of Trustees (BOT)** is the elected tribal governing body and sets policy and governance for the tribal nation; Board Members are elected every two years, and provides steady and equitable governance of tribal voters, transparency and fairness in legislating and guiding other government entities; the BOT also conducts government-to-government consultation to state and federal agencies seeking tribal input and formal consultation requirements for projects in the CTUIR ceded lands.
- Additional?

[1.10] Summary and Conclusions

Food is a thing that brings us all together, and First Foods hold us accountable to the *tamanwit* of the land, and the promise that the Foods and the People made to one another. By centering First Foods in our climate adaptation planning, ensuring adaptation is done with the ability to advance environmental justice happens without effort, and builds a plan that supports tribal sovereignty and the ability to exercise treaty rights into the uncertain future. The adaptation framework on the right shows how these different adaptation strategies come together around food access, while the vignettes in the center guide us to a timeline and approaches that can be used to reach these strategies.

Short Term Actions

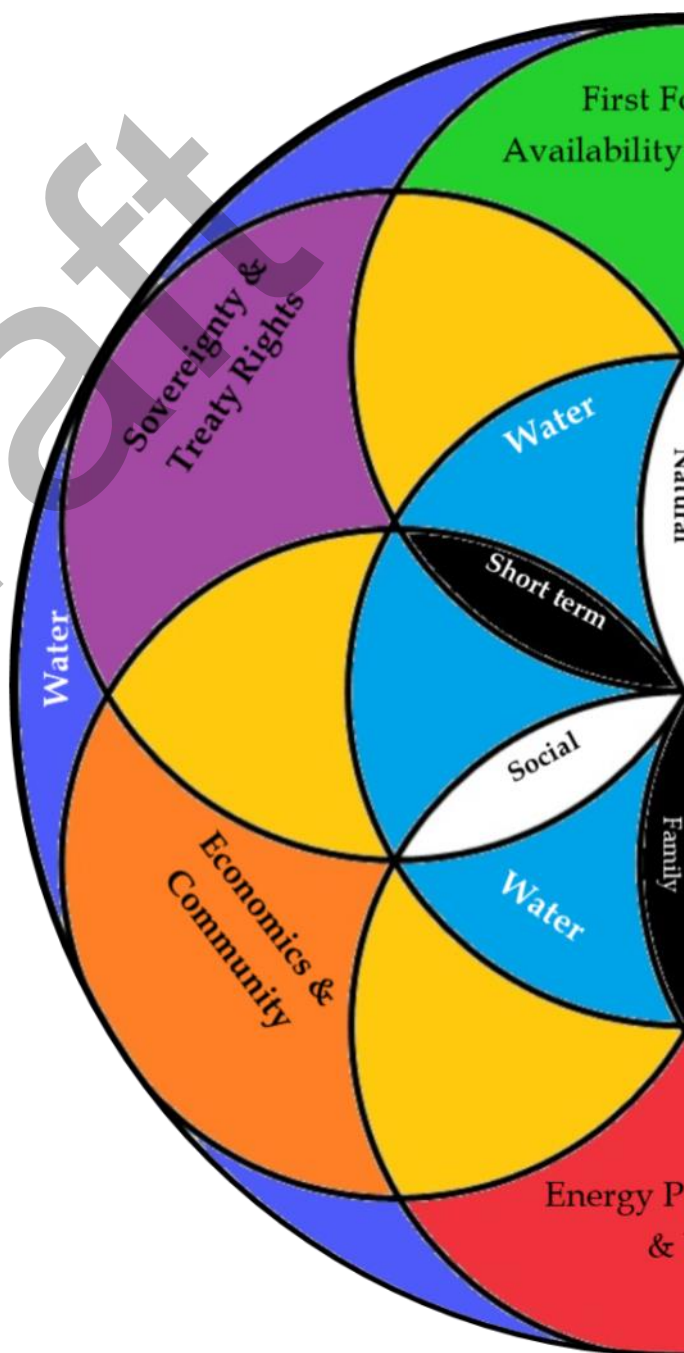
Strategies that can be implemented in relatively short periods of time, and with little additional input to address actions. Strategies that can be initiated in 1–5 years, and usually are a combination of preparatory actions, feasibility or planning reports, awareness campaigns, or public outreach.

Long Term Actions

Strategies need more time, energy, or capital to be fully realized. These strategies often involve raising additional funds, acquiring other lands, or building new partnerships. These are strategies that would require at least 6+ years to fully implement, and could be the construction of new facilities, long term planning, and facilitated migration.

Individual and Family Actions

Strategies to empower communities, families, and individuals to feel part of climate change preparations. These are actions that can be taken at a residential or neighborhood scale. These are strategies that would be easy for families to work into their daily lives, and bring a sense of empowerment and inclusion into preparation for the impacts of the climate crisis, and could be things like awareness around health implications of impacts, observations of the changes that are occurring, and approaches to water, energy, and biodiversity conservation.



Natural Strategies

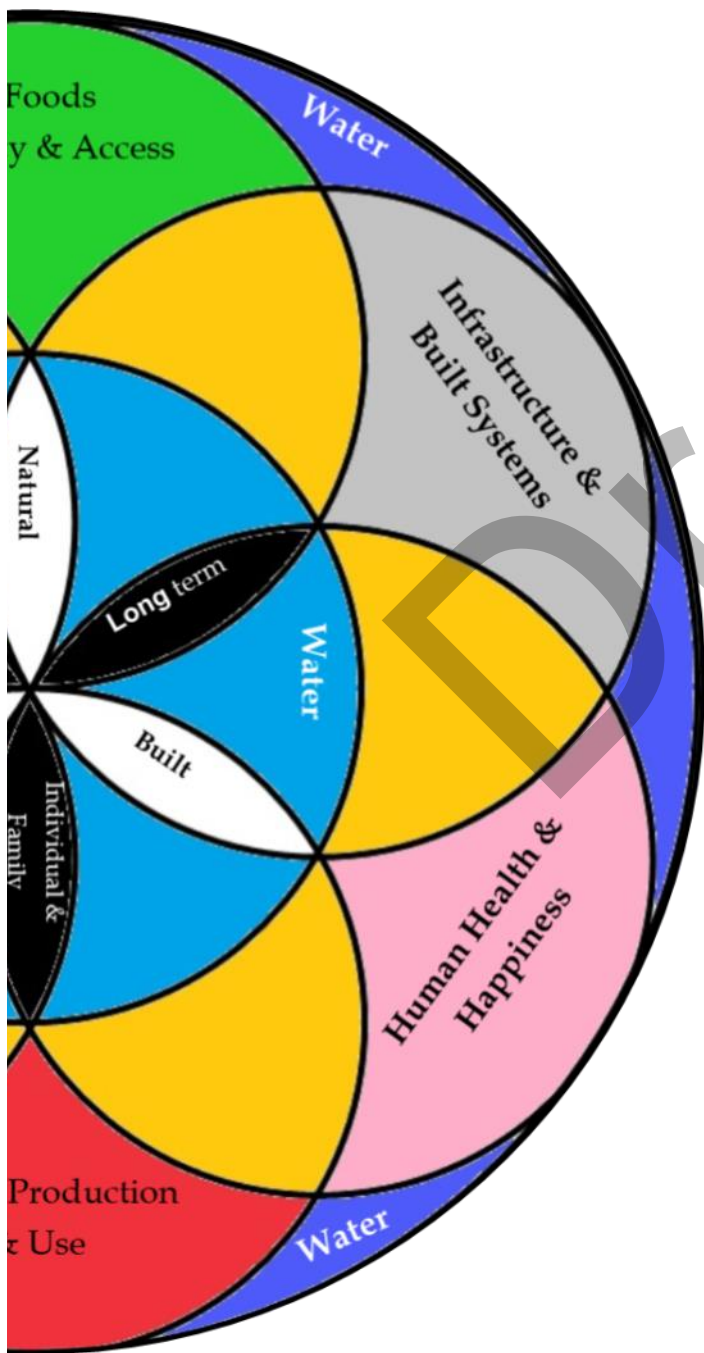
Naturally functioning ecosystems are very good at managing resources for the health of First Foods, since these species have adapted over long periods of time to these climatic conditions. Systems that occur with natural expressions are almost invisible in the way they function, at least until they are pushed out of balance and cause problems. These are often long term but highly efficient strategies that use indigenous knowledge and use the natural ecology to build resilience. These approaches are a strong tool for changing the way natural disasters present themselves, and can work to expand First Foods access.

Built Strategies

Engineered systems in place that support tribal member access to First Foods, stable living, and communication. These strategies can often mimic natural ecosystems in the way they function, but are engineered to be most efficient where natural strategies are not possible to implement. These can include transportation infrastructure that facilitate tribal members access to harvest First Foods, ensuring safe home and work environments that foster healthy living and good quality of life, and storm & wastewater management through engineered systems that mimic natural ones.

Social Strategies

These strategies address the behavioral and social structures that dictate many of the ways we allocate resources. Transfer of skills, and knowledge between individuals, generations, and demographic groups is an essential way we keep information and culture moving in a way that is helpful, and behavioral changes that reduce demand have a role in expanding conservation opportunities. Empowering people to participate in policy formation and the creation and support of frameworks and opportunities for people to connect will build community cohesion for use to effectively act collectively to implement these strategies.



First Foods have been keeping their promise to the People to sustain and nourish them, and CTUIR has been working to keep that reciprocity robust and resilient. CTUIR and the First Foods have survived since time immemorial together, adapting to natural changes in climate that have occurred over these millennia, and have survived world-ending events before, and tribal culture is made up of a resilient system of connections within our land use planning and management, built environments, and within our systems of social and economic support, and it is these connections that have withstood time and disaster and are still strong to this day. Below is a brief summary of the information presented in this chapter as it is important for subsequent chapters:

1. Tribal Sovereignty and jurisdictional issues must be considered

CTUIR is a federally recognized tribe and retains rights and ownership over its Umatilla Indian Reservation (UIR), though this land base has been reduced through various acts of bureaucratic and forceful theft, and the remaining land is a patched “checkerboard” of different land ownerships that complicate attempts to conduct large landscape management actions. CTUIR works with many different landowners and jurisdictions on and off the UIR, and has the capacity to work with neighboring USFS National Forests, private landowners who are willing to facilitate First Foods harvest opportunities, and state and federal agencies that have lands within the CTUIR ceded lands like the BOR, BLM, and other Dept of the Interior entities.

2. First Foods Mission and Indigenous knowledge are priority

First Foods are inherently climate resilient compared to settler-colonial systems that displaced these native plant and animal species. Tribes that have been supporting and reconnecting to these Foods have been building climate resilience into their operations even though it might not bear the label of climate adaptation explicitly. Identifying ways of strengthening and supporting these connections is the most efficient way of developing adaptation strategies that prioritize environmental and food justice.

3. Food systems impact and are impacted by the climate crisis

Global food production and distribution has deep roots in the climate crisis, as conventional agricultural production and global supply chain network transportation are large contributors to annual greenhouse gas emissions of nations. These systems are also vulnerable to the impacts of the climate crisis, as disruptions around the world will have rippling effects on those far removed from the immediate situation, and shifting climatic conditions throw chaos into established production patterns. Bringing food production back to a local and tribal level will help CTUIR buffer the worst of these effects in the uncertain future.

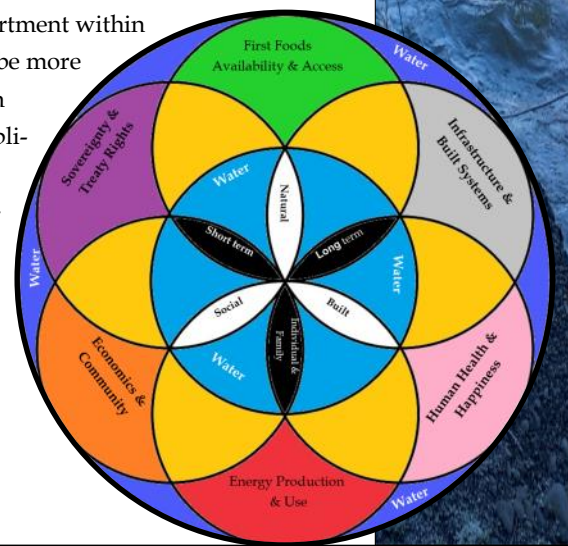
4. Tribal government departments and entities are already governing this crisis and will do so into the future

Indigenous people have been on the front lines of the climate crisis for centuries and their very practicing of culture and religion built resilience into their lands and people. The work that CTUIR has been doing for decades can be viewed as climate adaptation because it connects the people with each other and with the land, and facilitates the tribal government to operate and govern itself.

5. Climate adaptation strategies must involve everyone and must be interdisciplinary in nature to maximize effort and efficiency of implementation and success.

Climate adaptation is not the sole responsibility of any one program or department within the tribe, as these all work with different focuses and objectives. Efforts will be more successful if they are built in partnerships and collaborations that can sustain them and make them accessible to those who want to participate. Interdisciplinary efforts are also eligible for an expanded range of funding from various funding areas and can create projects that have more longevity, and community participation with efforts of tribal government.

It was the purpose of this chapter to provide a context for the information that follows, and to document the ways that CTUIR departments and entities participate in its Indigenous food system and in the climate adaptation planning effort.





[1a] References & Credits

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- ix. Quaempts, E. J., K. L. Jones, S. J. O'Daniel, T. J. Beechie, and G. C. Poole. 2018. Aligning environmental management with ecosystem resilience: a First Foods example from the Confederated Tribes of the Umatilla Indian Reservation, Oregon, USA. *Ecology and Society* 23(2):29. <https://doi.org/10.5751/ES-10080-230229>
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- xiv. Climate Adaptation Wheel, CTUIR DNR FFPP

[1b] Additional Resources

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- CTUIR Comprehensive Economic Development Strategy (CEDS) Report (2016)
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- "Wiyaxayxt,/Wiyaakaa'awn: As Days Go By: Our History, Our Land, and Our People"
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- CTUIR First Foods and Food Systems Assessment (2020)
- Additional?