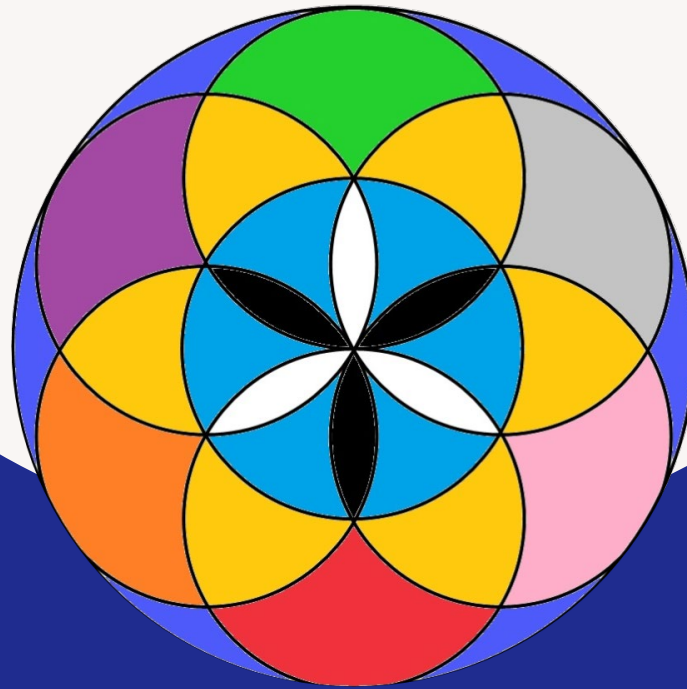


CAP WORKSHOP #4

SESSION 1

FRIDAY MAY 9TH 8-10AM



AGENDA

Trauma-Informed Space Agreement

BOT Priority

Pre-workshop survey

Example from DNR or Participant

AWP connections to CAP

Small Group Exercise

- Short-Term = Mitigation
- Long-Term = Adaptation

Participants Reflections & Takeaways

Post-workshop survey

Follow-Ups with FFPP –if needed

TRAUMA INFORMED SPACE AGREEMENT

3

First Foods Policy Program strives to provide services that are Trauma Informed and will work to maintain a space that is supportive, conducive to learning, and will reduce harm at all possible opportunities.

To do this, we ask that participants agree to the following terms. **By remaining in this space today, you agree to:**

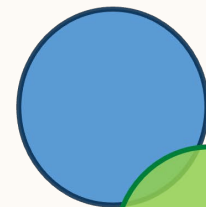
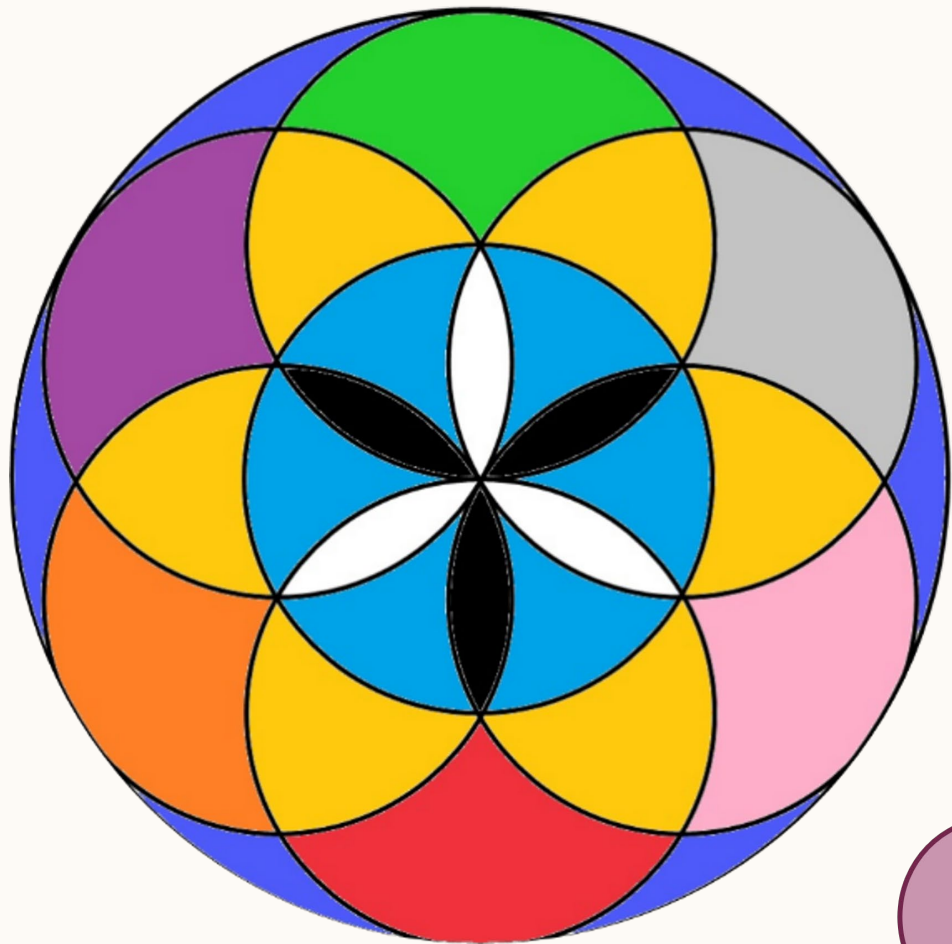
- Bring a learning mindset instead of an expert mindset
- Set a safe space: What's said here stays here, what's learned here leaves here
- Listen with curiosity & compassion
- Be patient, practice taking a pause
- Listen with empathy
- Hold space for multiple truths
- Create a judgment free zone
- Ask for what you need
- Commit to open two-way communication
- Keep each other safe
- Contribute to the well-being of the group
- Speak with intention, use "I" statements
- Be polite and respectful
- Understand that people are the experts in their own experiences
- Keep in mind we are all working towards a common goal

First Foods Policy Program will work to keep this space as safe as possible for you to share your experiences and learning with others. We reserve the right to give warnings to those who are not abiding by this agreement. If you are warned and do not change the offending behavior, First Foods Policy Program reserves the right to ask you to leave.

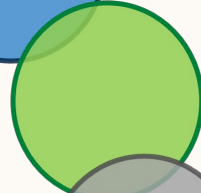




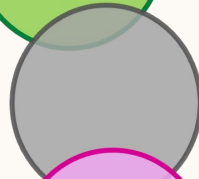
THE BOARD OF TRUSTEES
(BOT) PRIORITY 9.2 “DEVELOP
SCHEDULE AND ACTION PLAN
FOR CLIMATE ADAPTATION
PLAN IMPLEMENTATION FOR
ALL CTUIR DEPARTMENTS AND
ENTITIES (WRC, YELLOWHAWK,
NCFS, CAYUSE).



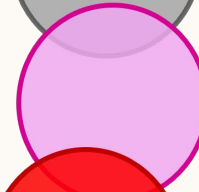
Cúuś
Water (Surface & Groundwater)



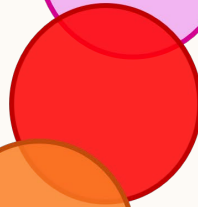
Áwtñi Tkʷátat
First Foods Availability & Access



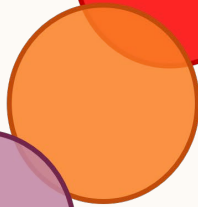
Infrastructure & Built Systems



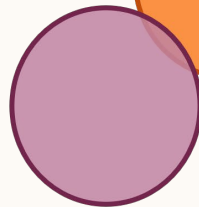
Sápánaknuwit ku Kʷatánáwit
Human Health & Happiness



Energy Production & Use



Ḫaxáykwit ku Pawiyalixsimit
Economics & Community



Tímani Tamánwit
Sovereignty & Treaty Rights

PRE WORKSHOP SURVEY

6

Q1: To what degree do you feel your department has a role to play in climate adaptation/response?

Q2: What level of awareness or understanding do you feel you have about climate impacts that will affect CTUIR priorities?

Q3: Evaluate the statement: I feel I have a firm understanding of the role my position can contribute to being prepared for climate crisis mitigation and adaptation.

EXAMPLES OF CLIMATE RESPONSES

Employee impacts
Client/Customer Responses
Service adjustments



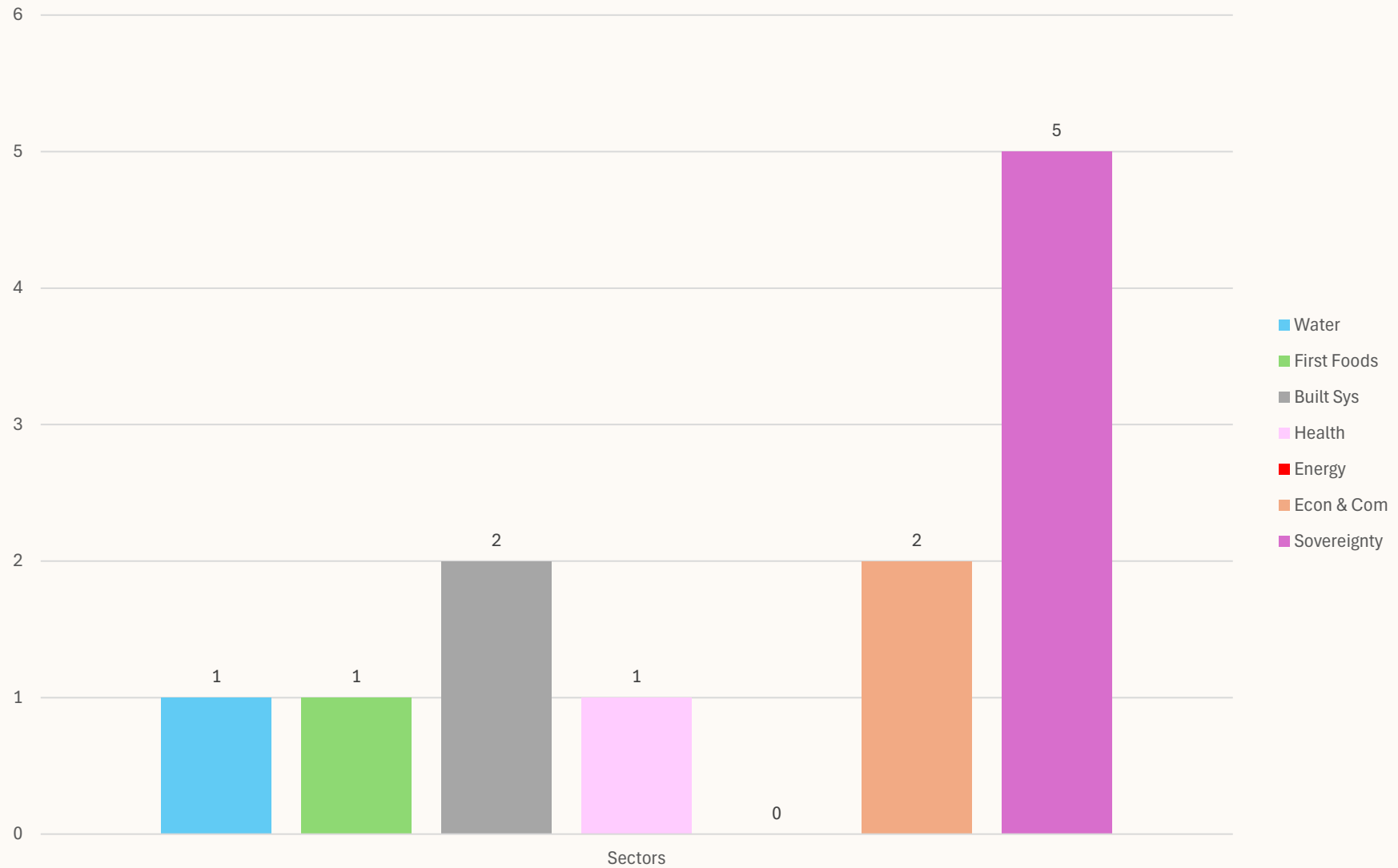
AWP CONNECTION TO CAP

8



- General categories of services in AWP
- General categories of climate impacts
- General categories of climate mitigations/adaptations

CTUIR OIT 2024 AWP CAP Sectors



Built Systems

Planning and Monitoring

3.2 Facilitate and participate in the Capital Improvements Committee

4.1.3 Provide expert analysis and interpretation of geographical problems using statistical, geo-computational, and visual methods.

Economics & Community

Emergency Response

1.3.4 Identify and acquire the best equipment to respond to natural and man-made disasters for emergency response.



Sovereignty & Treaty Rights

Planning & Policy

1.3.2 Transparently and cooperatively plan and implement change as needed.

3.3 Monitor, assist with, and coordinate with DNR in Climate Change Planning and response actions and opportunities in collaboration with DNR programs and CTUIR departments.

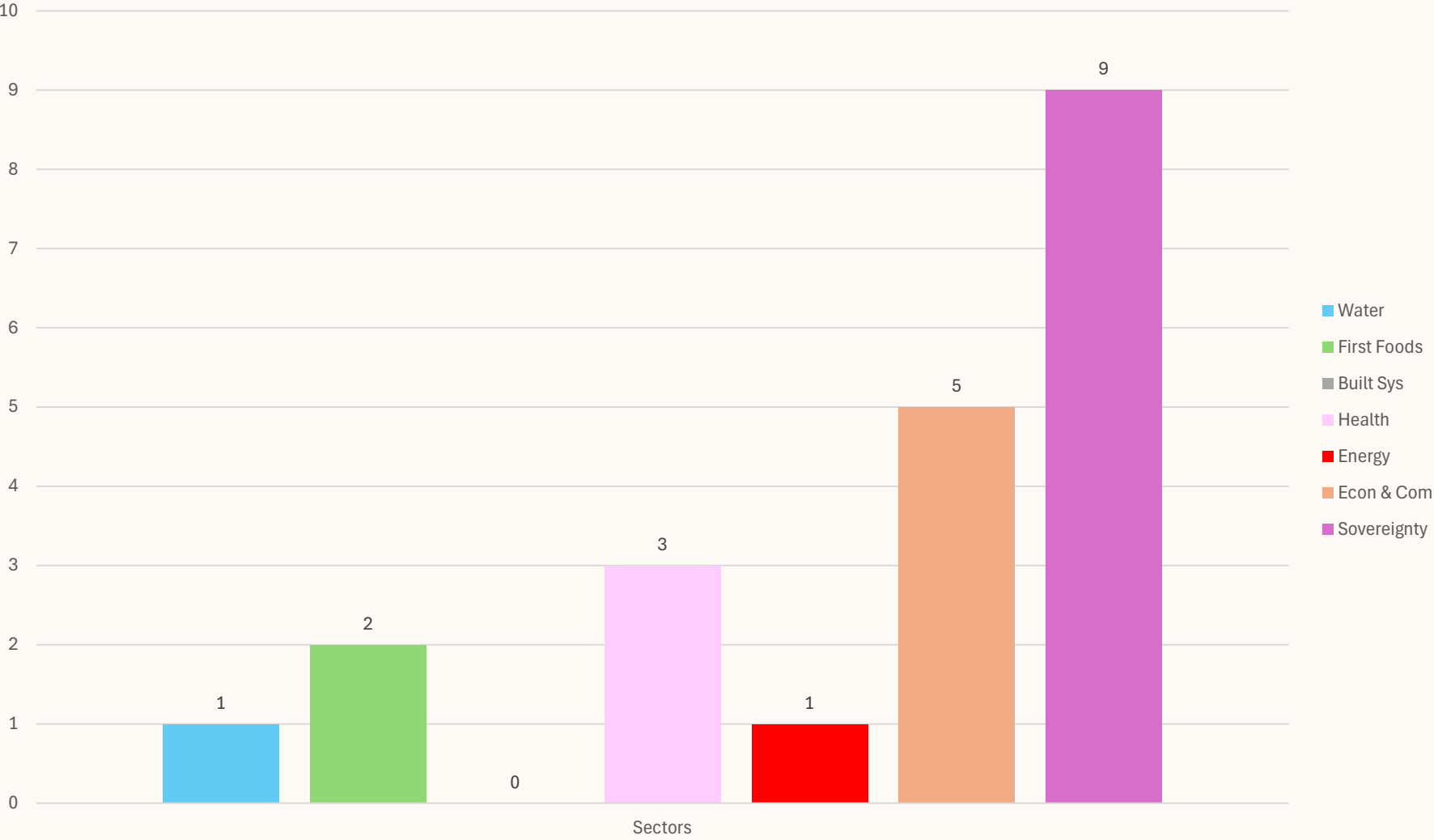
6.5 Identify and prioritize program funding needs and develop grant proposals to improve and expand existing services consistent with the department's mission and goals.

Coordination & Communication

2.1.1-6 Assist and support special projects with other departments that arise during the year as assigned.

4.1.1 Work with State, County, and Federal governments and non-profits to coordinate the beneficial data exchange.

CTUIR Tribal Court 2024 AWP CAP Sectors



Water & First Foods

Conserve & Support

3.7 Conserve resources, especially water and energy, to the greatest extent possible.

4.6 Support River Vision and First Food policies and implementation.

Economics & Community

Community Support

1.3 Process petitions or claims in all civil matters within the jurisdiction of the CTUIR, including but not limited to domestic abuse protection orders, custody, dissolution, child support, guardianships, housing evictions, traffic violations, fish and wildlife, and employment appeals.

1.5 Hold emergency hearings for housing evictions and domestic abuse protection orders.

5 Exercise expanded sentencing authority under the Tribal Law and Order Act (TLOA) and Violence Against Women Act (VAWA).

Sovereignty & Treaty Rights

Planning & Policy

3.8 Work with the Planning Department to update the Comprehensive Plan benchmarks that involve the justice system.

3.9 Consistent with the Tribal Court Assessment of 2022, implement best practices and recommendations that improve services to the Reservation community.

3.11 Engage in Climate Change planning, community outreach, and strategy development and implementation.

Education & Understanding

2.3 Incorporate forms and methods of restorative justice as appropriate. Examples include evaluation of healing-to-wellness models, assisting defendants with arrangements for court-ordered alcohol and drug evaluation and treatment, anger management evaluation and treatment as recommended, victim impact panels, Batterers Intervention Program, and community service.

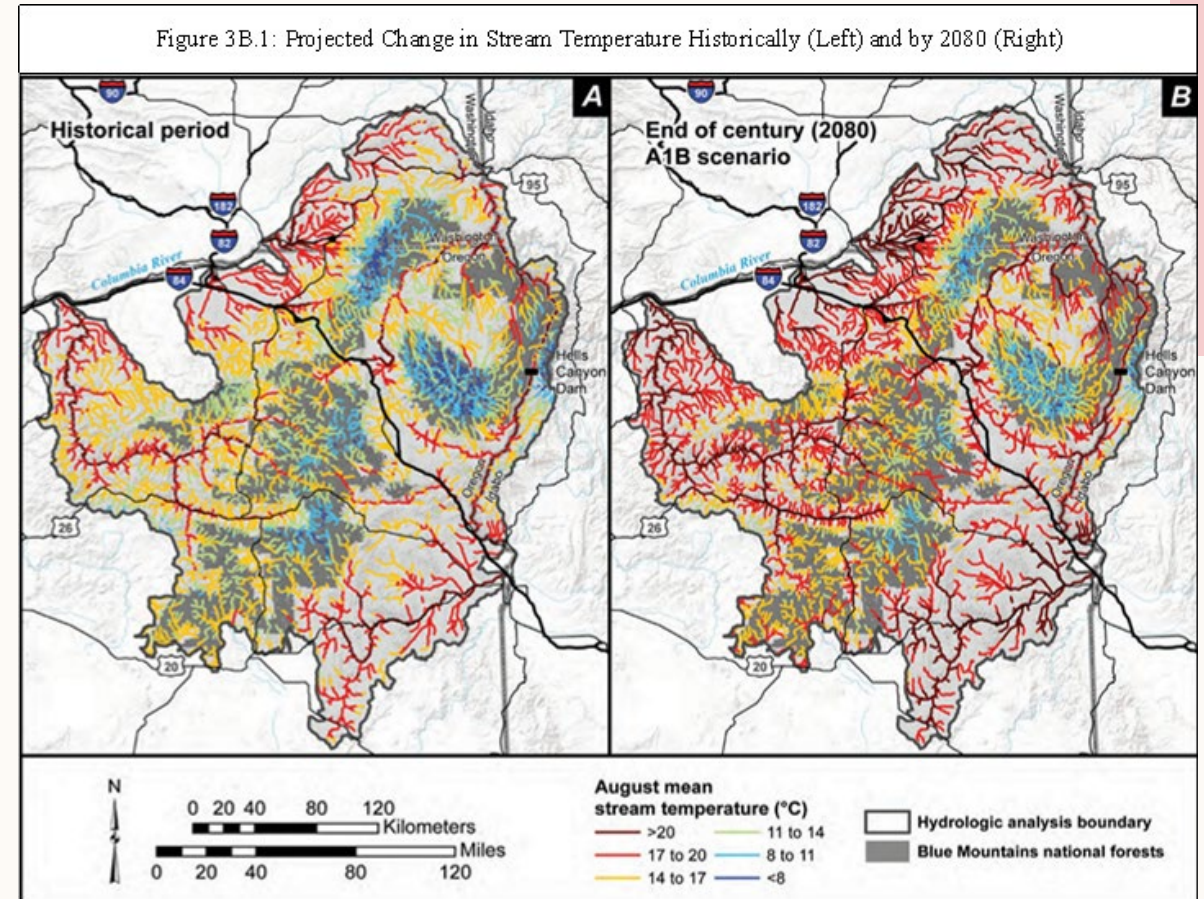
4.3 Host meetings and/or trainings for partners, stakeholders, and staff on Tribal Court jurisdiction, sovereignty, and Indian law.

HIGHLIGHTED CLIMATE IMPACTS –FIRST FOODS

Warming Surface Water Temperatures

Peak winter stream flows will shift earlier into the year, and cause a reduction in water available in the summer season. Warmer air temperatures will also contribute to warming river systems, impacting aquatic species directly through potentially lethal temperatures and lower oxygen content, and terrestrial species through an increase in algal contamination.

17-20% increase in August stream temperatures at lower elevations and a 14-17% increase in higher mountain levels by the end of the century in 2100 (Clifton USFS 2018) in Figure 3B.1 (page 70).

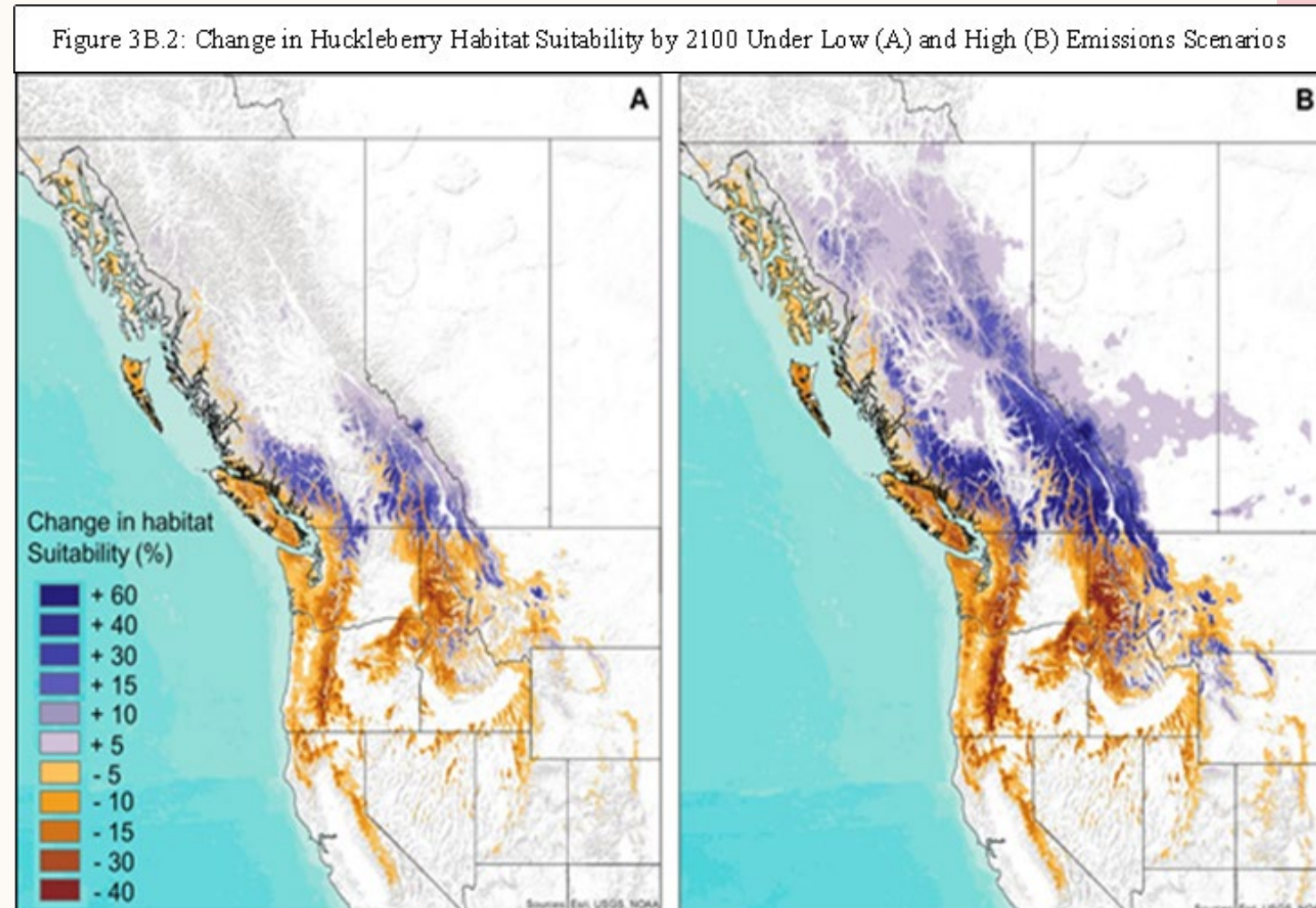


HIGHLIGHTED CLIMATE IMPACTS –FIRST FOODS

Plant Habitat Suitability Migration

Habitat suitability depends on many factors such as stream temperature, vegetation type, topsoil erosion, and connection with environmental reciprocal relationships, such as with pollinators and host fish. As seasonal precipitation and temperatures change, suitable habitat for First Food species will shift as a result.

10—40% reduction in habitat suitability for huckleberries across much of CTUIR Ceded and traditional use lands, with some modest 15-30% increases in the Eagle Cap Wilderness, as in Figure 3B.2 (page 71). Timing of harvests may shift 1–2 months earlier (Prevey et al 2019).

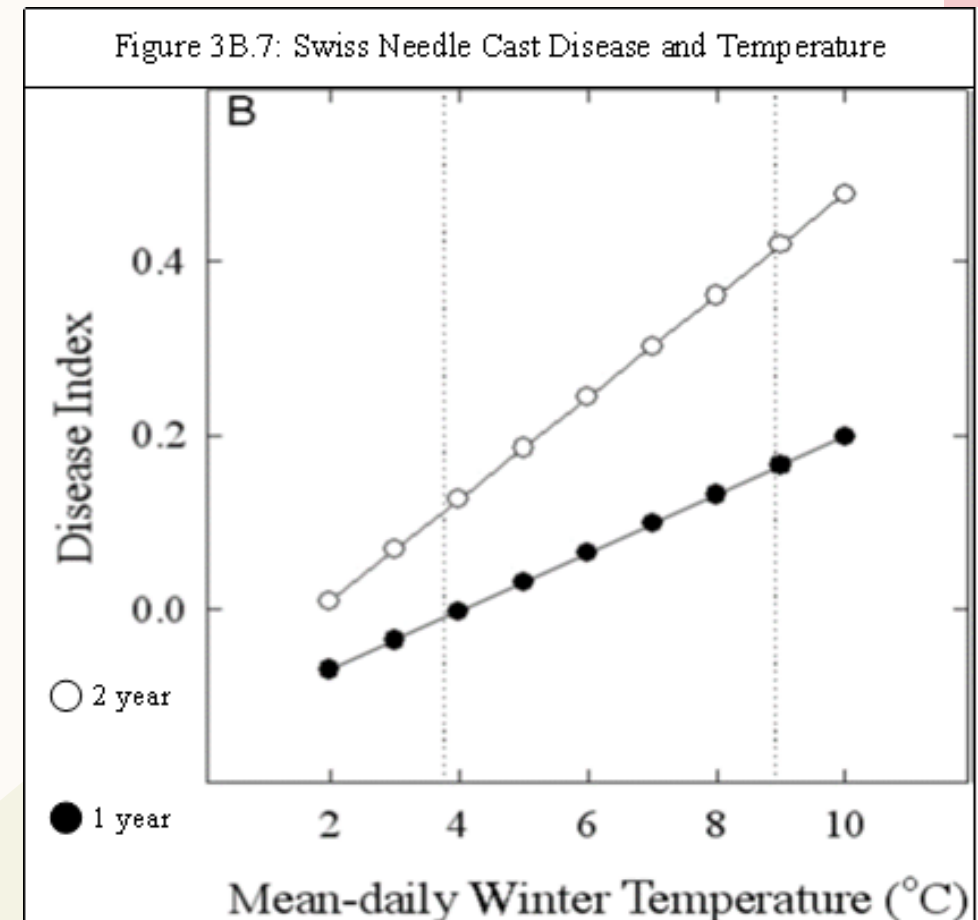


HIGHLIGHTED CLIMATE IMPACTS –FIRST FOODS

Changes in Plant and Animal Pathogen Potential

Animals and plants are susceptible to disease and pathogens, which are likely to have an altered distribution and virulence under warmer conditions. New strains or changed relationships with existing illnesses are likely to cause impacts to First Foods success.

Many data gaps exist. **5°C (9°F) winter temperature increase results in a 15% increase in infection of one-year old conifer needles, and a 30% increase in infection for two-year old needles** (Stone et al 2008) as seen in Figure 3B.6 (page 80). Other diseases of note include: Big Game illnesses like **M. ovi**, and **Epizootic Hemorrhagic Disease (EHD)**; fish illnesses like **Ich** and **Furunculosis**; and conifer pests like **Western Pine Beetle**, **Mountain Pine Beetle**, and **Pine Engraver**.

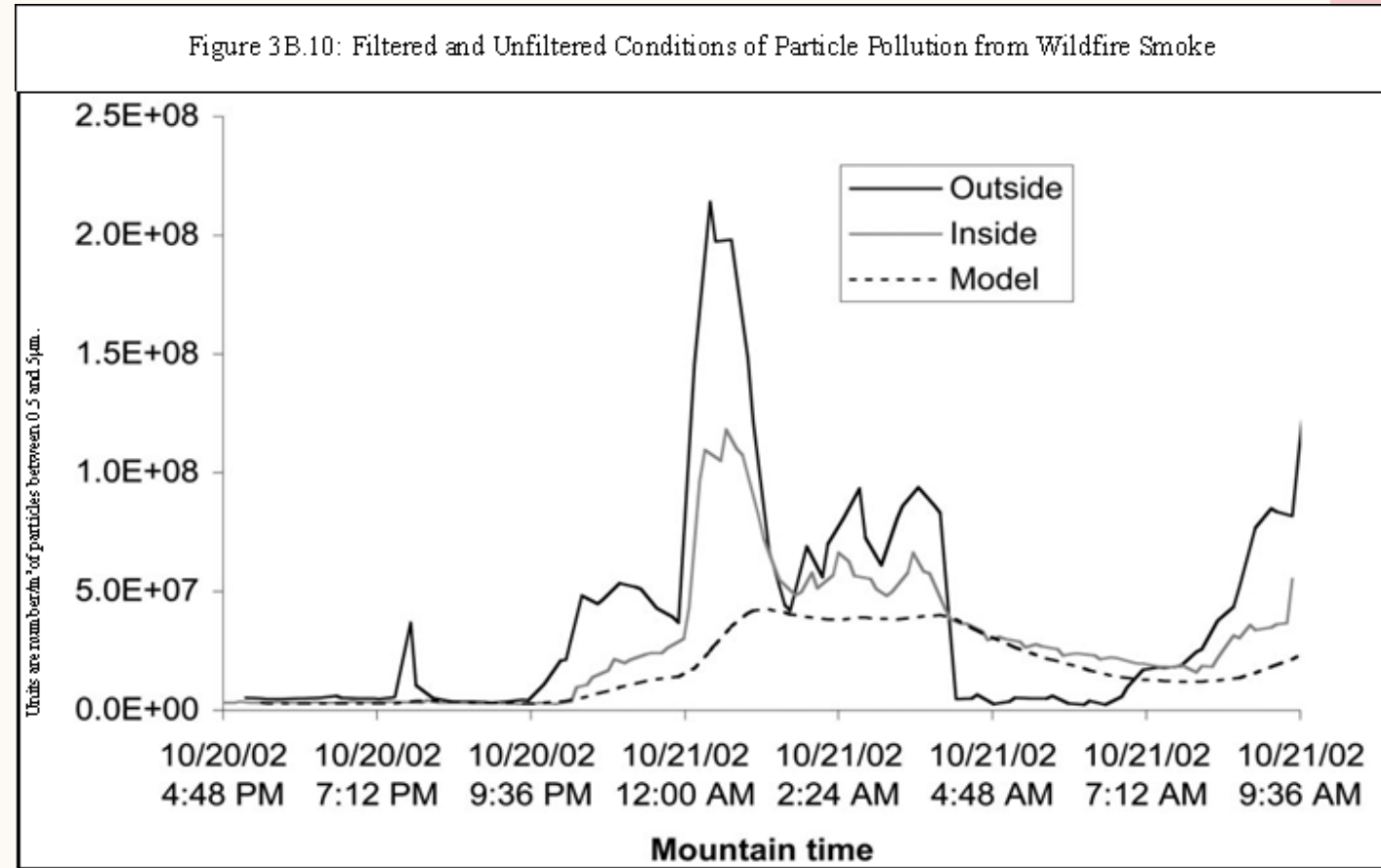


HIGHLIGHTED CLIMATE IMPACTS –FIRST FOODS

Poor Air Quality over Large Areas

With conditions for wildfire increasing, smoke from near and distant fires will create poor air quality conditions that restrict the ability for Tribal Members to safely exercise Treaty Rights.

7.6% per day increase in exposure to particle pollution during smoke events if outdoors without respiratory protection (Henderson et al 2005). This can be calculated to be **15-45% increase in smoke exposure potential during future fire seasons**, as seen in Figure 3B.10 (page 95).

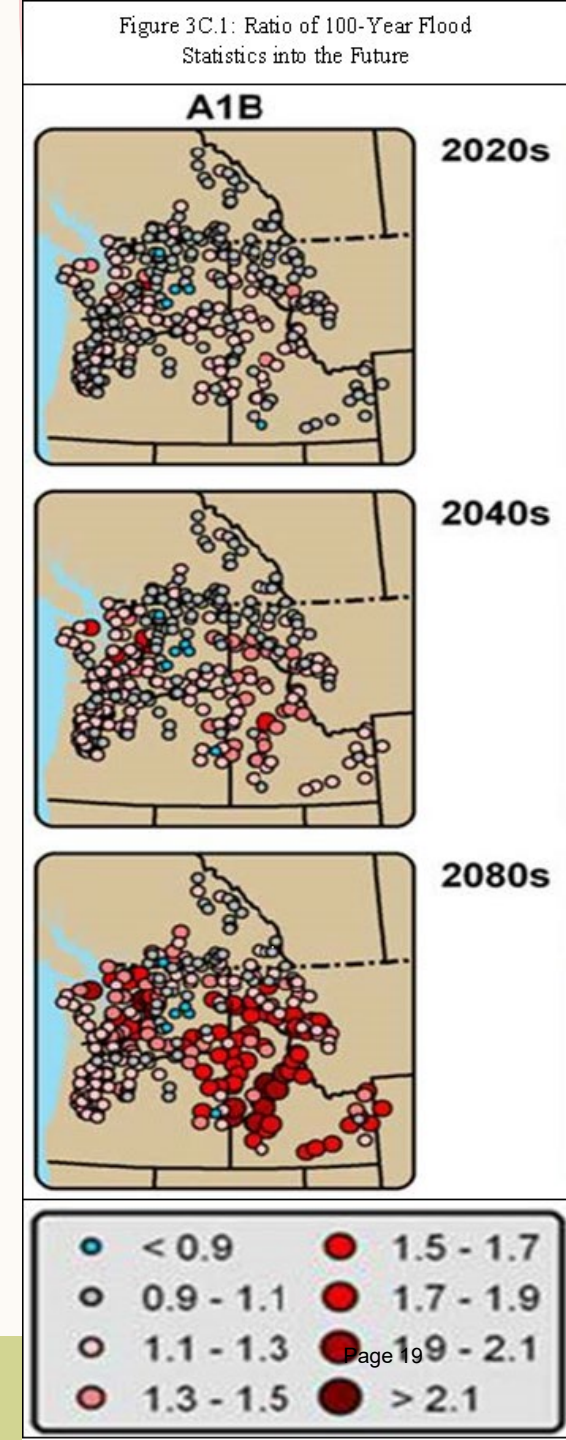


HIGHLIGHTED CLIMATE IMPACTS – BUILT SYSTEMS

Increased Severity and Frequency of Storms

Seasonal flooding events will increase in magnitude, though large annual variability will exist. Flooding and associated storms are likely to increase damage to homes and buildings, cause roadway blockages, and down power lines.

20-30% increase in 100-year flood events by 2040 (Tohver and Hamlet, 2010) as seen in Figure 3C.1 (page 108).



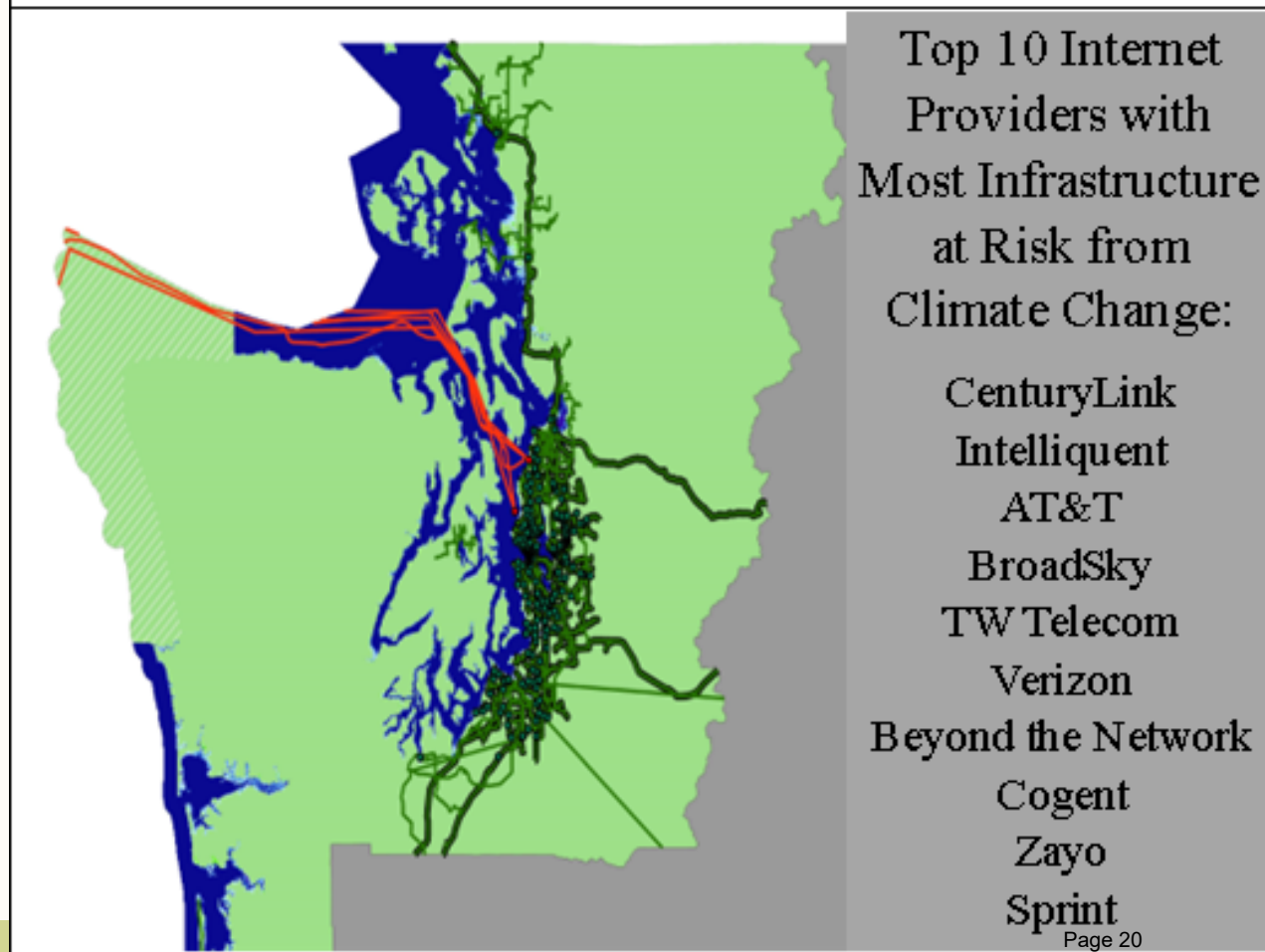
HIGHLIGHTED CLIMATE IMPACTS – BUILT SYSTEMS

Potential Disruption of Communication Networks

Telecommunications networks have physical infrastructure that spans large areas of the Pacific Northwest region to bring telephone and internet access to residents of Oregon, Washington and Idaho. These networks have cables and connection hubs that are threatened by climate change impacts and extreme events.

Estimated **236 miles (23%) of fiber optic line in the region is at risk of seawater inundation** (Durairajan et al, 2018) as seen in Figure 3C.5 (page 125).

Figure 3C.5: Telecommunications Infrastructure Threatened by Sea Level Rise

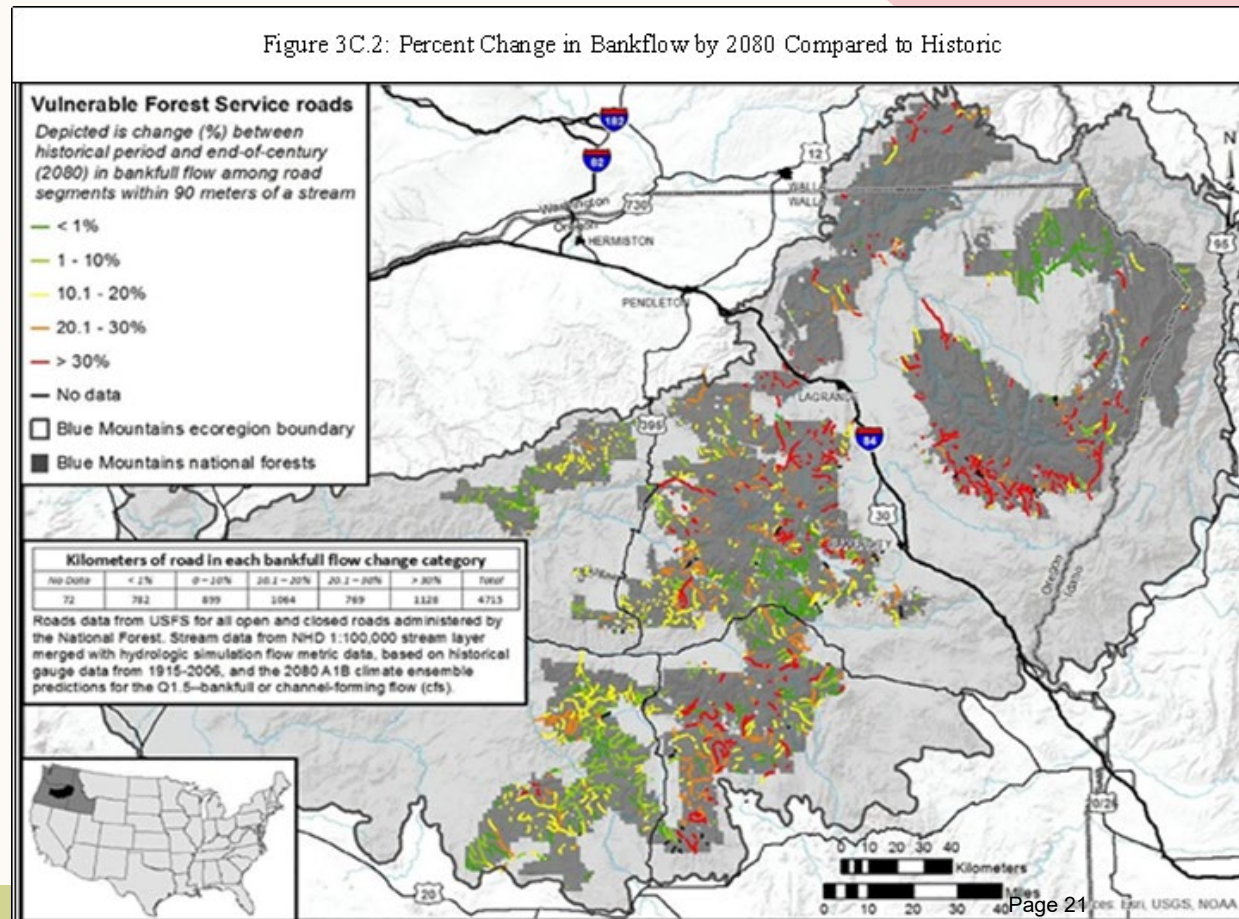


HIGHLIGHTED CLIMATE IMPACTS – BUILT SYSTEMS

Increased Vulnerability of Transportation Infrastructure

Transportation to cultural sites and harvest opportunities to exercise Treaty Rights require access roads for Tribal members. USFS low traffic roads in forested lands are especially necessary for First Foods access. Many stream-adjacent sections of these roads will be threatened by flooding.

Roads in the Powder and Burnt River basins, southwestern Malheur River, Grande Ronde River, and southern Eagle Caps Wilderness have 20-30% + risk from floodwaters; least threatened is the Wenaha-Tucannon Wilderness, with 10% or less of risk change, as seen in Figure 3C.2 (page 109).



HIGHLIGHTED CLIMATE IMPACTS – HEALTH

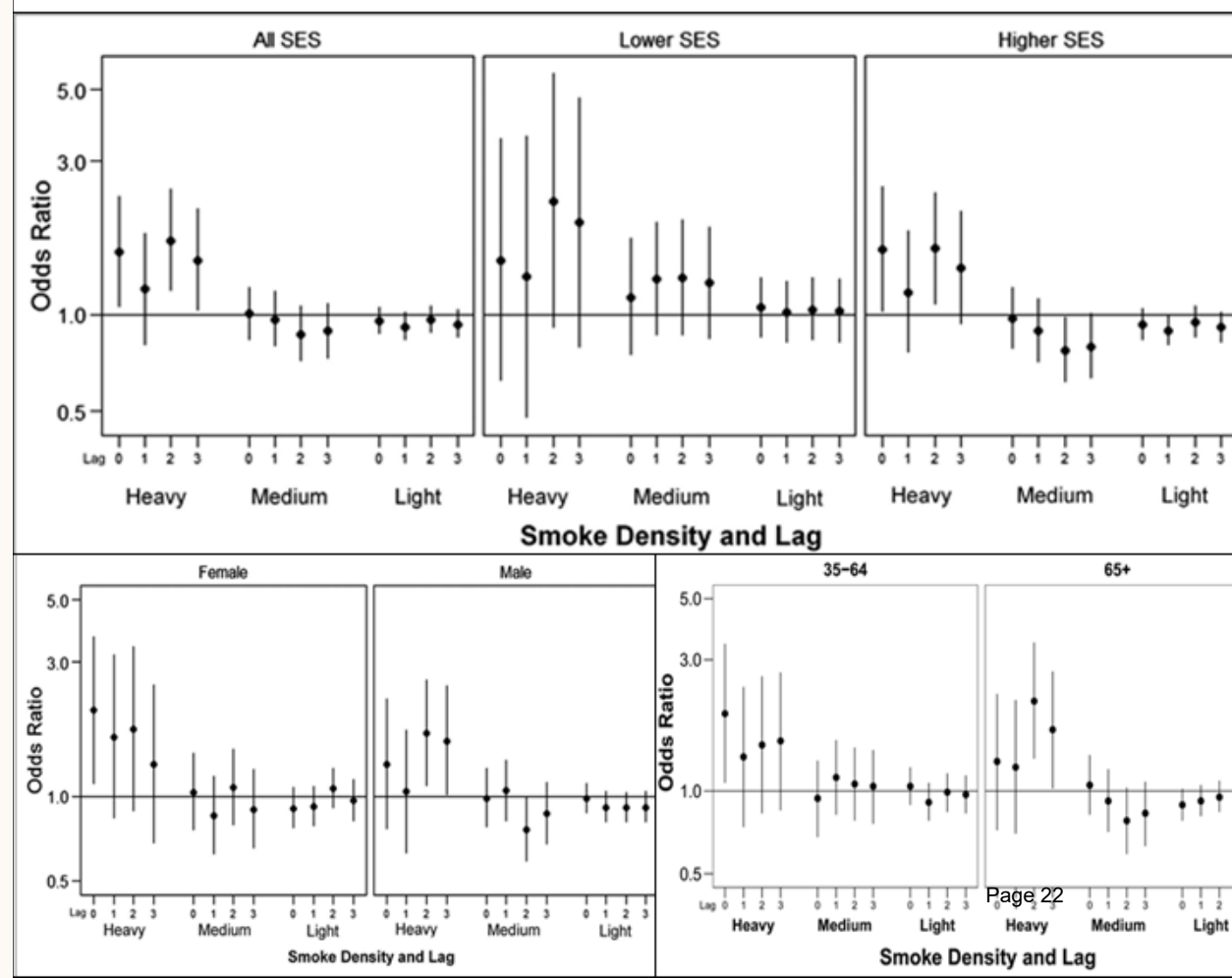
22

Complications From Wildfire Smoke

Particle pollution has a very negative effect on health, especially for those who are chronically exposed, and who live with pre-existing illness. Complications from smoke will increase morbidity and mortality around each event.

Heavy smoke events result in a **9.0% increase in the odds of same-day respiratory mortality**, and a **14.0% increase in the odds of same day COPD mortality**. **Cardiac arrest risk increased 70%** as seen in Figure 3D.2 (page 142). There was also a **4.9% increase in lung cancer** and **10% increase in brain cancer associated with smoke exposure** (Jones et al 2020).

Figure 3D.2: Increased Risk of Out of Hospital Cardiac Arrest (OHCA) Due to Wildfire Smoke Over Time

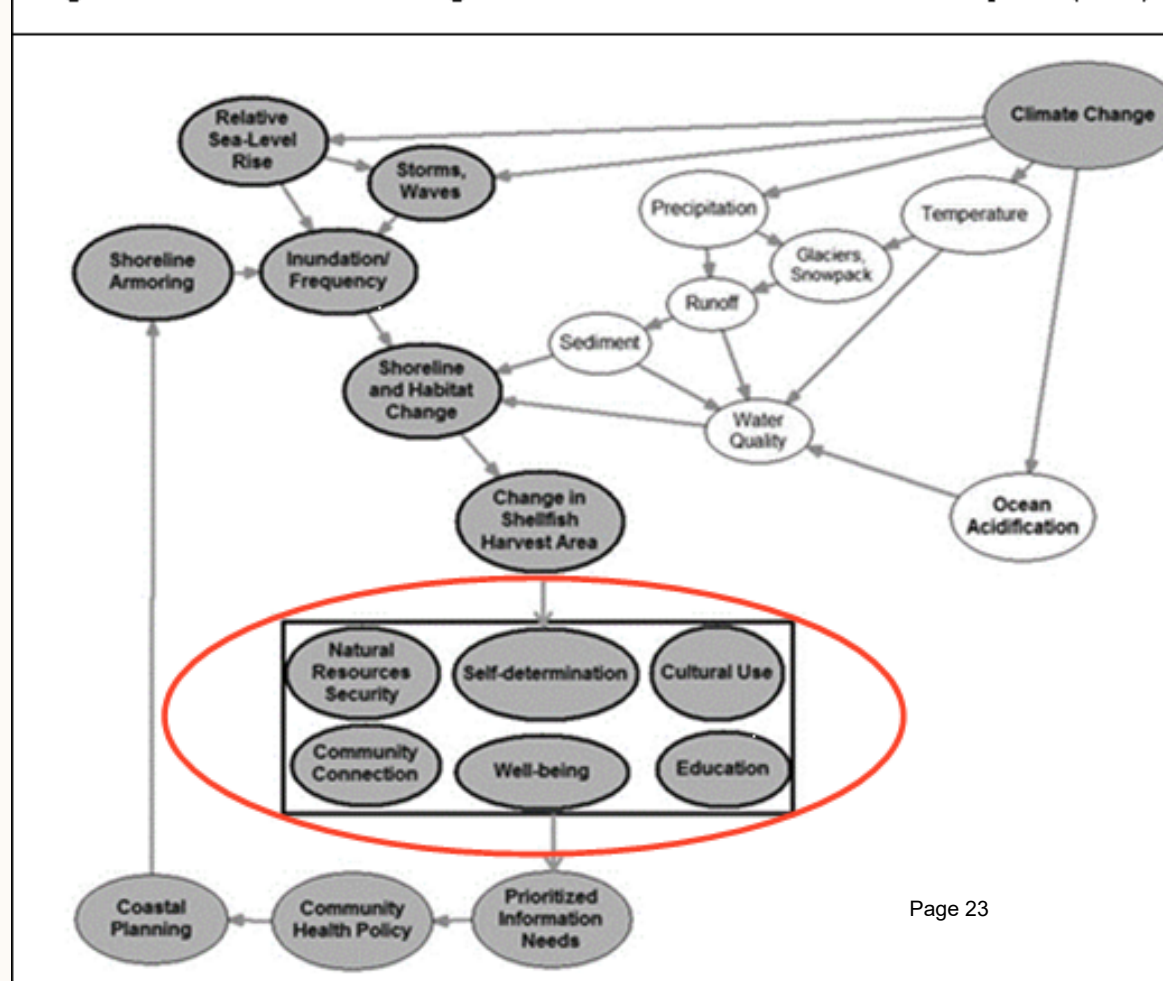


HIGHLIGHTED CLIMATE IMPACTS – HAPPINESS

Potential Disconnection from First Foods, Indigenous Culture, and Spiritual Connection

First Foods historic migration routes and timing are likely to shift and increasing frequency of natural disasters can trigger existing emotional health issues and potentially create new ones. Indigenous health is integrally tied to land, First Foods, community, and culture. Environmental climate impacts create challenges to traditional foods access, which in turn affect the Indigenous Health Indicators: **Natural Resources Security, Self Determination, Cultural Use, Community Connection, Well-Being, and Education.** These are used to inform needs, health policy, and resource planning (Donatuto et al 2016) as seen in Figure 3D.7a (page 163).

Figure 3D.7a : Swinomish Indigenous Health Indicators and Climate Impacts (2016)



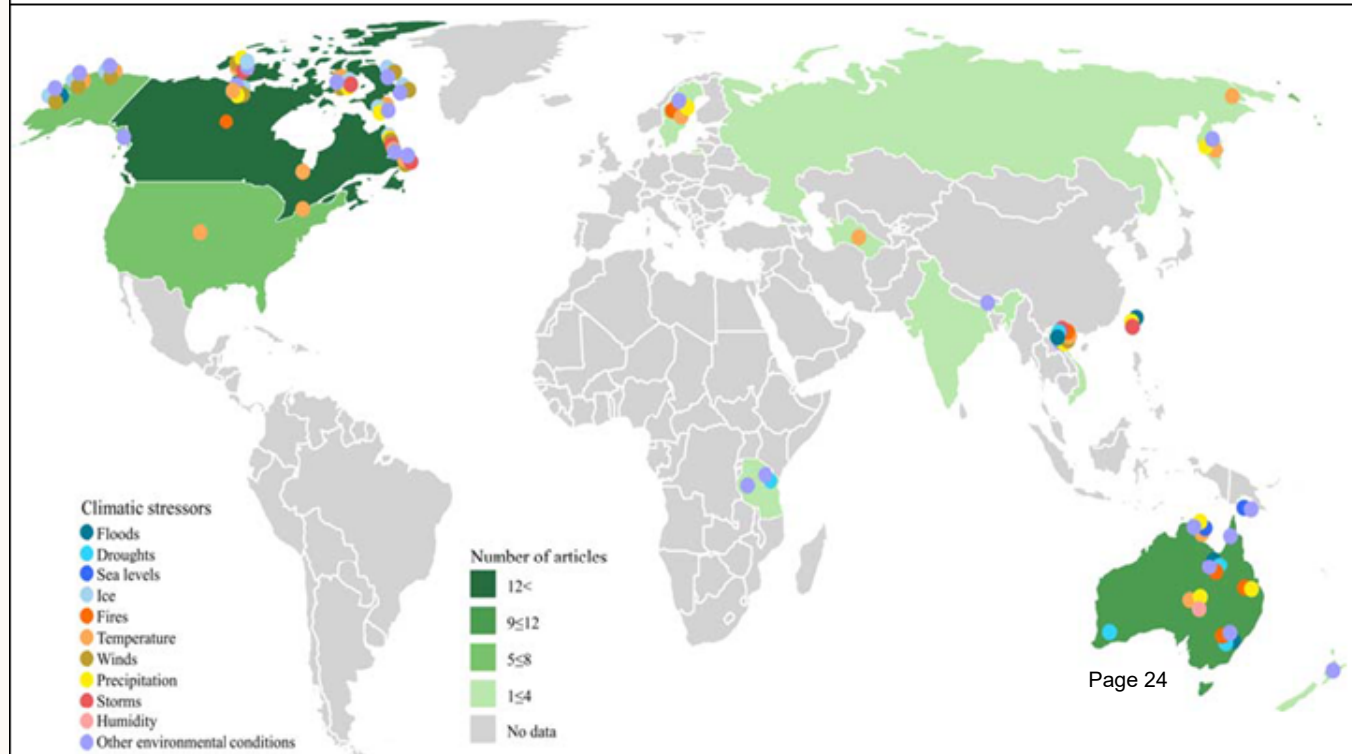
HIGHLIGHTED CLIMATE IMPACTS – HAPPINESS

Exacerbated Climate Grief, Eco-anxiety, and Solastalgia

Indigenous communities' concept of health is woven with land management practices and religious ceremony. Health outcomes are greatly improved for Tribal people who are able to continue access to subsistence foods and cultural practice.

Vicarious distress for those experiencing intense weather or environmental hardship; access to, and time spent on, the land linked to fulfilling psychological needs; altered or loss of place results in negative consequences for livelihoods, cultural practices, and social networks, as well as to alterations in personal and collective identities (Middleton et al 2020) as seen in Figure 3D.8 (page 165).

Figure 3D.8: Global Research Into Mental Health Impacts Associated with Climate Change for Indigenous Communities



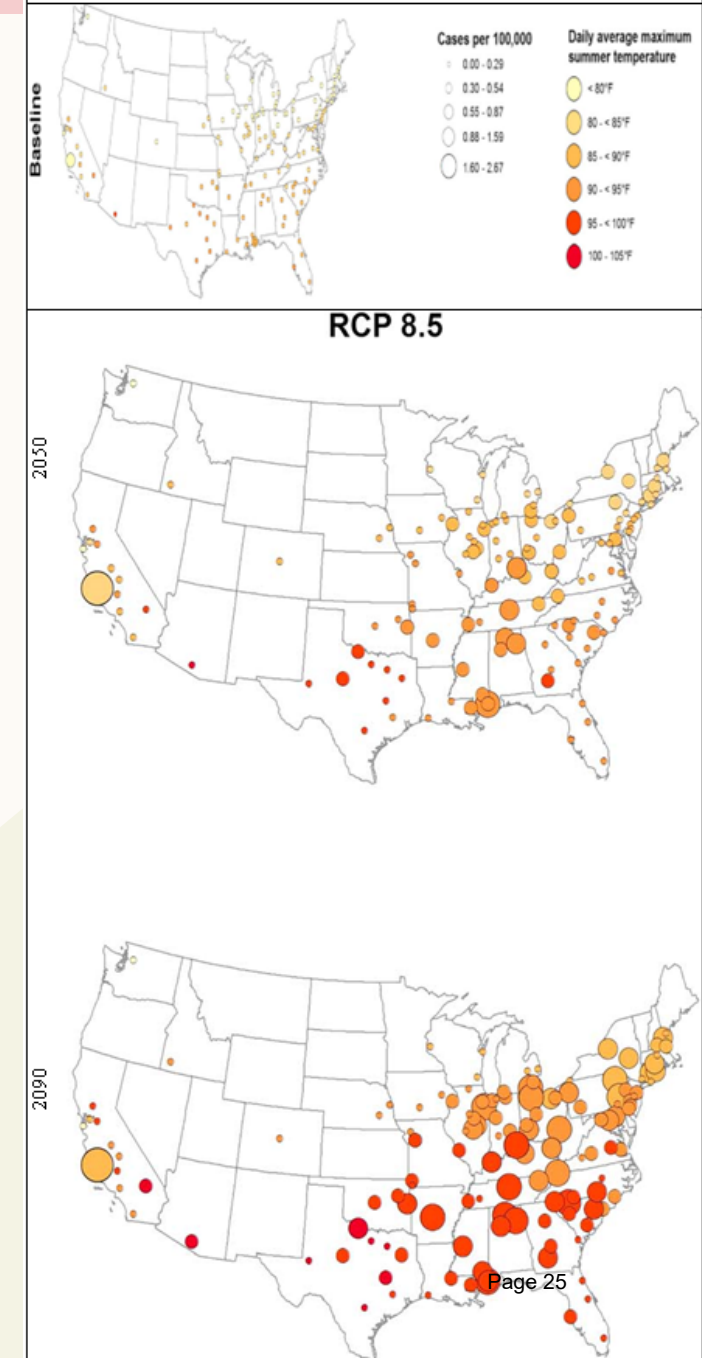
HIGHLIGHTED CLIMATE IMPACTS – ECONOMICS

Increased Household, Governance, and Emergency Expense

Acute and chronic climate impacts to health and emotional wellbeing will increase costs for healthcare, emergency treatment, insurance compensation, and cost of doing business for all sectors and communities.

Heat exposure related emergency department visits alone will cost an additional \$21.9-30.2 million dollars by 2050, and \$30.1-69.2 million dollars by 2090 per year across the U.S. (Lay et al 2018) as seen in Figure 3F.1 (page 216).

Figure 3F.1: Projected Increase in Extreme Heat in U.S.

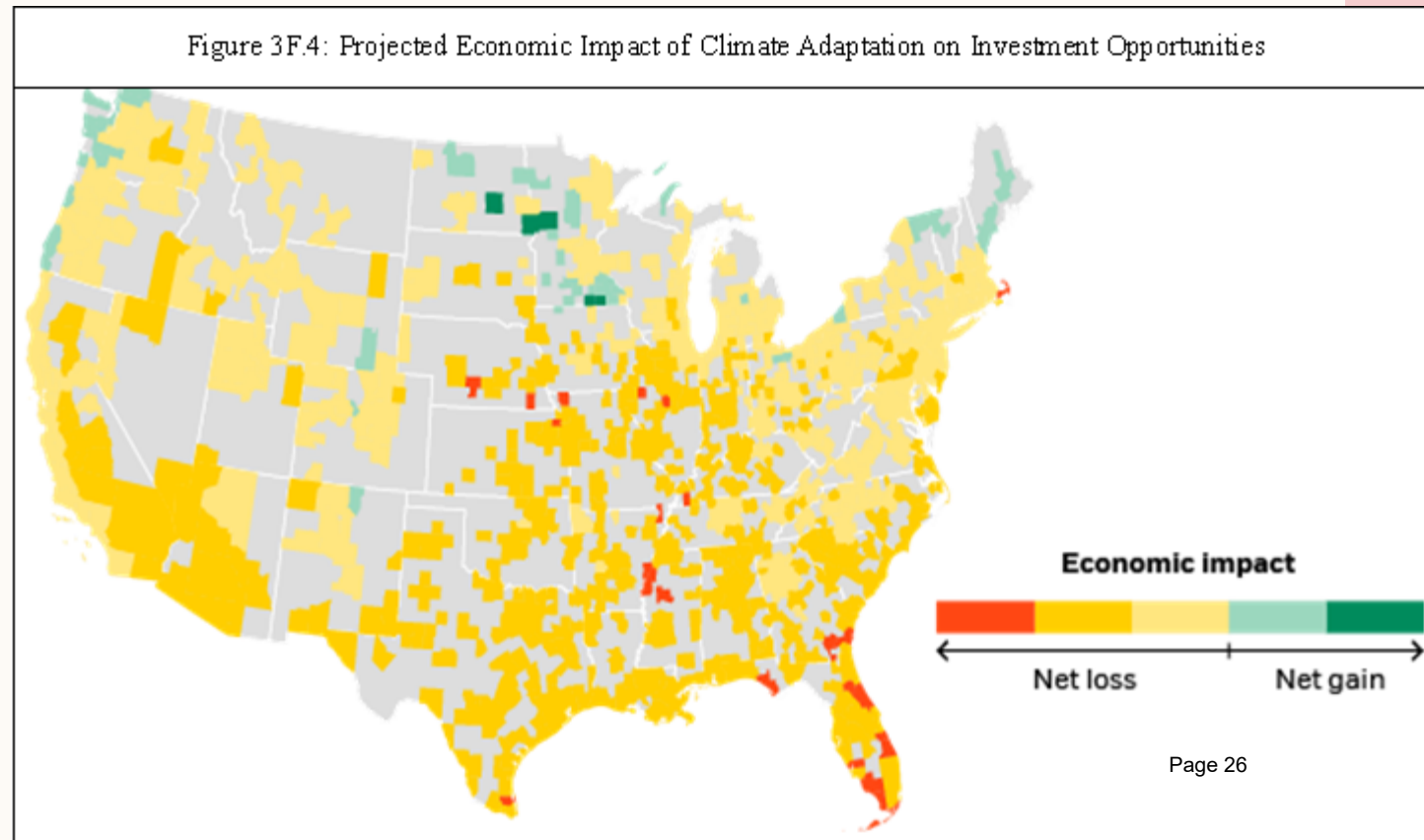


HIGHLIGHTED CLIMATE IMPACTS – ECONOMICS

Shifting Economic Dynamics and Revenue Generation

Acute natural disaster damage and chronic increases in operations strains will cost incurred by cities and Tribal Nations, as an increasing percentage of funds used to respond to disaster in the future. Adaptation could save money and investment opportunities.

58% of metropolitan areas in U.S. face climate-related GDP hits of 1% or more, and will be losing money on repairing and responding to the damage. Eastern Oregon and Washington are projected to experience mild net economic loss (Shulten et al 2019) as seen in Figure 3F.4 (page 221).



HIGHLIGHTED CLIMATE IMPACTS – COMMUNITY

Potential Decrease in Community Cohesion

Community connection will be essential in adaptation but is also vulnerable to climate impacts, including social isolation, distress, and irrational decision-making.

Those who spend a lot of **time outdoors** are most likely to be **affected by multiples and compounding kinds of climate impacts. Impacts on people's decision-making and actions can create additional and unforeseen complications** (Hayes and Poland 2018) as seen in Fig 3F.6 (page 240-241).



February 2020 Flooding event (pictured) required first responders from CTUIR departments and volunteers from the Tribal community, as Dept of Public Safety, Public Works, and the Incident Command Team coordinated operations and responders.

HIGHLIGHTED CLIMATE IMPACTS – COMMUNITY

Increased Mental and Emotional Strain

Chronic and acute stress from a changing climate have a physical and emotional toll on those living through this crisis. Psychosocial resilience is providing **health education, building connection, delivering health and first aid resources, and improving communication to strengthen a community's capacity for calming, hope, safety, self-efficiency, and connectedness** (Gaughen and Hacker, 2019) as seen in Fig 3F.7 (page 243).

Figure 3F.7: Pala Indian Community Psycho-Social Resilience Framework

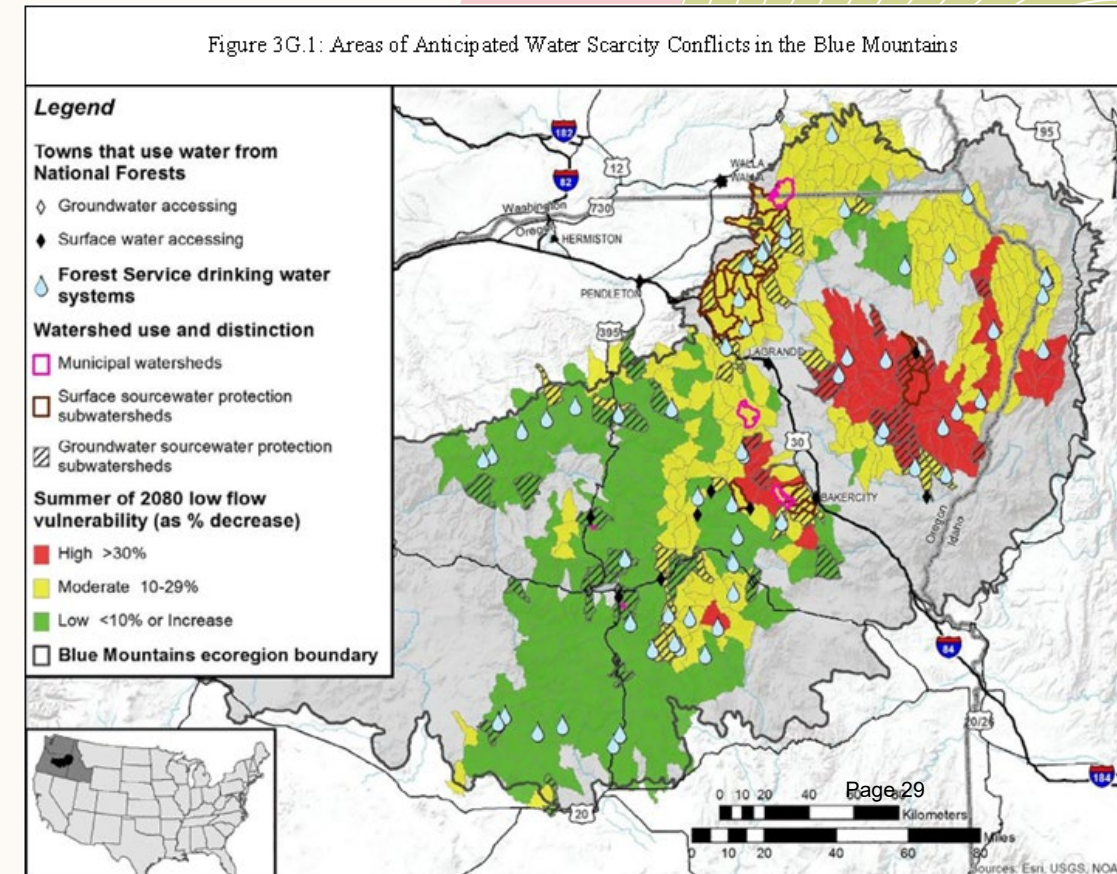


HIGHLIGHTED CLIMATE IMPACTS – SOVEREIGNTY

Potential Increase in Conflict over Water and Land Resource Management

As resource availability changes, conflicts over who can access the existing resources is likely to increase; this is particularly true of water. Conflicts over water in the region are likely to intensify, though there are proactive ways to anticipate for conflict.

High potential for water availability conflict the **Eagle Cap Wilderness, the Imnaha River, the Elkhorn Mountains along the Wallowa-Whitman National Forest, and Anthony Lakes recreational area** due to 30% reduction in summer base flow (Clifton et al 2018) as seen in Figure 3G.1 (page 263).



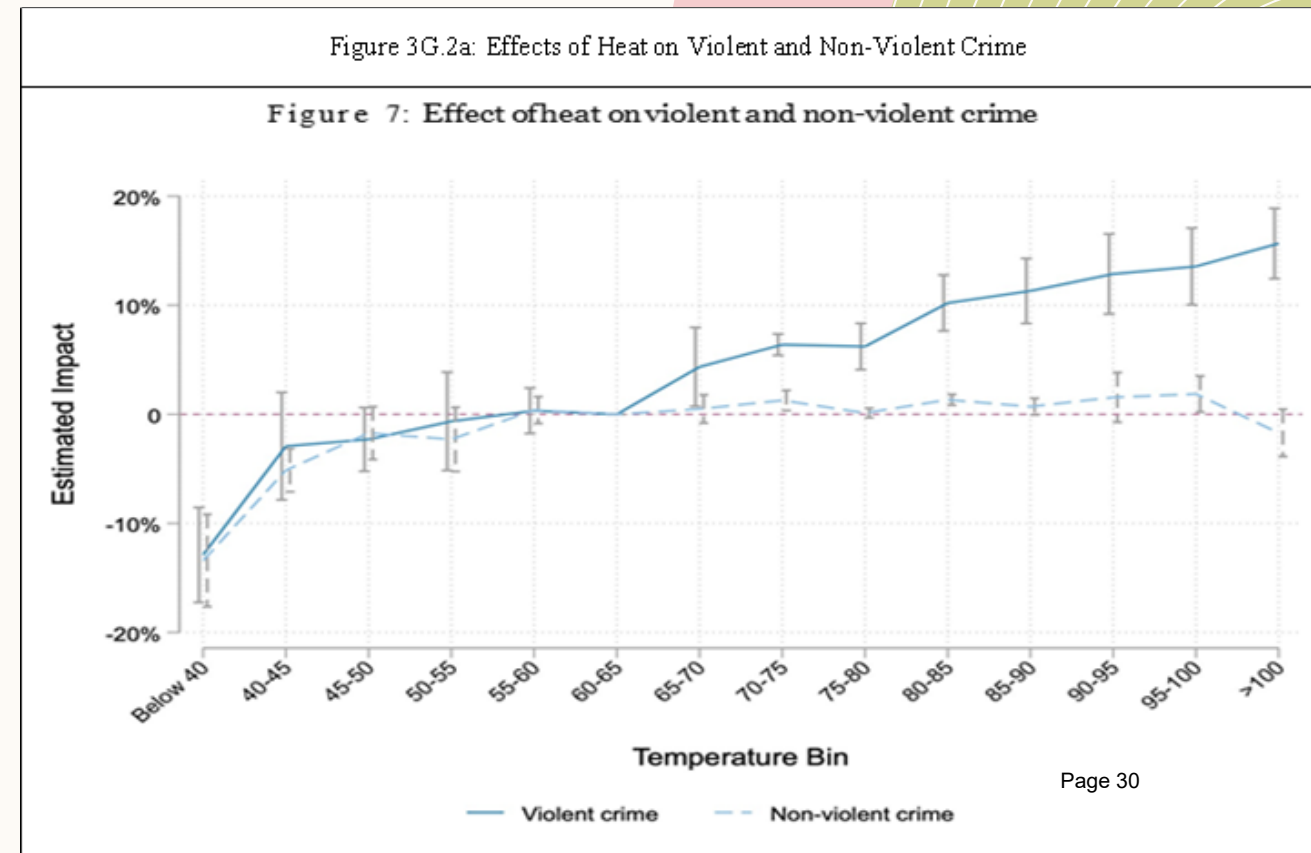
HIGHLIGHTED CLIMATE IMPACTS – SOVEREIGNTY

30

Increases in Criminal Activity and Harsher Sentencing

Heat causes impairments in rational decision making, and causes people to act in unpredictable ways. Violent crime and arrests are likely to increase as a direct result of extreme heat, especially incidences of assault with a weapon.

General arrests increase by 15% on extremely hot days, with largest effects on weapons charges and assault with a weapon. Violent crime arrests still increase by 9% per year by 2050 regardless of adaptation (Behrer and Bolotnyy 2021), as seen in Fig 3F.2a and Fig 3F.2b (page 265-266).



HIGHLIGHTED CLIMATE IMPACTS – TREATY RIGHTS

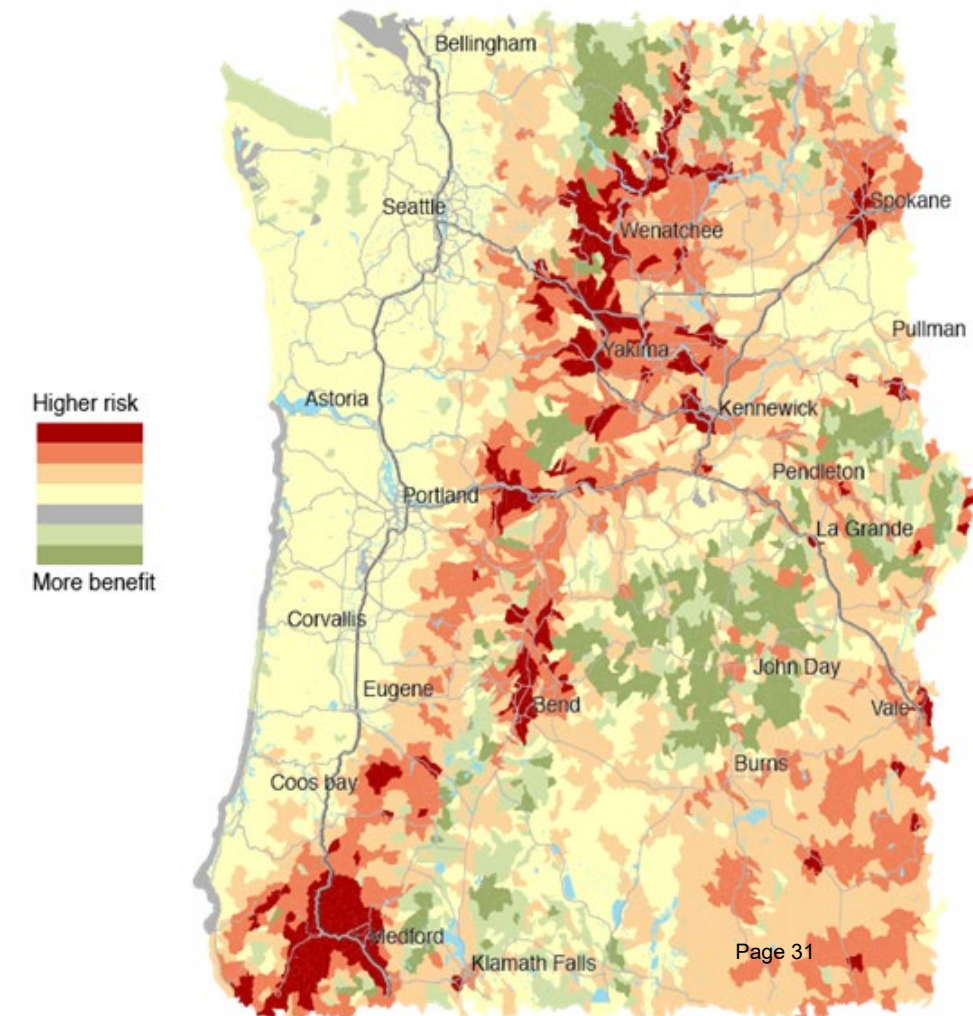
31

Opportunities to Reduce Climate Impacts Risk through Cultural Practices

For Indigenous people, cultural and religious practices are integrally tied with sustainable land management practices. Traditional burning is an excellent example of the diverse benefits of returning cultural practices to the land, especially out in the relatively rural areas of CTUIR Ceded and traditional use lands.

Returning **cultural burning to the Eastern Oregon and Washington region** is least risky and has potential for great benefits (Gilbertson et al 2018) as seen in Figure 3G.5 (page 282).

Figure 3G.5: Risk Potential for Prescribed Burn Implementation in OR and WA



MITIGATION VS. ADAPTION

Mitigation = Short-Term

Is an immediate reaction to climate change. The actions an organization makes to reduce environmental impacts that could include altering services to clients or patients.

Adaptation = Long-Term

Is a preventative response to climate change. These are proactive actions an organization takes to continue continuity of services under changing conditions to reduce future impacts to the environment.



SMALL GROUP ACTIVITY

Employee impacts
Client/Customer Responses
Service adjustments

Resiliency: what can we do in the short-term and what can we adjust for the long-term?

PARTICIPANT REFLECTIONS & TAKEAWAYS

STICKY NOTE BOARD --

Reporting back to the larger group for reflections

- Sticky notes
- FFPP will generate workshop takeaways per session for participant review

Post-meeting

- Share with the rest of your staff
- Record staff responses and suggestions
- Email FFPP post-workshop department notes

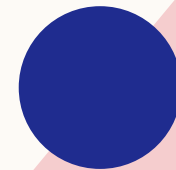
POST WORKSHOP SURVEY

35

Q1: To what degree do you feel your department has a role to play in climate adaptation/response?

Q2: What level of awareness or understanding do you feel you have about climate impacts that are/will affect CTUIR priorities?

Q3: Evaluate the statement: I feel I have a firm understanding of the role my position can contribute to being prepared for the effect of climate crisis mitigation and adaptation



EMAIL FFPP WITH QUESTIONS OR FOLLOW-UP NEEDS

FirstFoods@ctuir.org



**THANK
YOU**