Action Planning Workshop Comment Themes

CHELAN COUNTY CLIMATE RESILIENCY STRATEGY | DECEMBER 2020

After completing a draft <u>Climate Resiliency Strategy</u> in October 2020, Chelan County, in partnership with the Chelan Public Utility District, hosted two half-day workshops to help turn the strategies into action items. These workshops, held on December 2nd and December 3rd, had over 60 participants each day from various levels of government, local, state, and federal agencies, community groups, academic institutions, and interested community members. The groups broke into the following topic areas:

- Wildfire
- Public health and safety/Vulnerable populations
- Water Resources: Supply, Streamflow & Snowpack, Flooding
- Organizational structure/Communication and Engagement

For each collection of strategies, the breakout groups identified:

Strategy From the Chelan County Action Plan Key Actions Actions should contribute to success of a goal and be SMART: Specific, Measurable, Achievable, Relevant and have a time-frame. First steps: What are actions that need to be taking in the next 3-5 months to ensure this action gets taken? How will we know success? Think about metrics, numbers that are feasible and reasonable to track. Think Time-frame

Short 0-6 Months Medium 6-12 Months Long 1-2 Years (Feel free to adjust these as needed) Lead and Supporting Roles Who is the primary responsible organization or person, or for following up to find a good lead role? Cost and Implementation Resources Brainstorm financial costs and human resource needs even if a source is yet unknown. Brainstorm existing or possible sources.

This document provides key themes across multiple groups as well as unique actions that take the draft resilience strategy further. The focus of this document is on strategies more than one group discussed.

Full details of discussions are found at the project website:

qualitative and quantitative.

- Project website: <u>https://www.co.chelan.wa.us/natural-resources/pages/county-wide-climate-resilience-planning</u>
 - December Workshop and Action Tables

WILDFIRE

Across all the groups each draft strategy was addressed with the greatest dialogue about the strategies "checked":

- ✓ Build awareness of increasing wildfire risk and preparedness of Chelan County Communities
 Coordinate and improve emergency preparedness systems, particularly early detection
- ✓ Develop fire safe places in fire prone areas with wildland urban interface policies and codes
- ✓ Create fire adapted communities

Protect critical facilities (also see flooding)

✓ Coordinate ecological recovery programs for areas subject to fire in forested and shrub-steppe lands

Monitor exotic and invasive species on resource and natural lands and prioritize protection and enhancement of such areas (one group lightly addressed)

Continue to build partnerships across agencies to monitor and respond to climate changes and vulnerabilities in forested and shrub-steppe lands (one group lightly addressed)

- Proactively address fire resiliency through activities such as: pre-fire monitoring, maintenance/forest treatment, thinning, prescribed fire, and managed natural fire
- ✓ Air quality: education, training, and responses to protect people and communities during and after wildfire

Under each strategies, common themes and unique ideas about key actions, first steps, metrics, timing, roles, and resources are noted. Unique ideas go beyond the range of partners or resources identified in the Draft Strategy. Strategies with less attention could be reviewed in future Round Table Meetings.

Build awareness of increasing wildfire risk and preparedness of Chelan County communities

Common Themes

- Need for education to individuals and communities through multilingual communications plans, materials, classes, case studies of communities who have prepared.
- Events to organize around as well as ongoing tracking and awareness building.

- Key Actions/First Steps: Neighborhood Action Days
- Additional Partners / Roles: Chumstick Coalition, CAFÉ Wenatchee, Sustainable Wenatchee
- Resources: Grants through Community Foundation of NCW, Building Permit Fees, Insurance

Develop fire safe places in fire prone areas with wildland urban interface including policies and codes

Common Themes

Evaluation plan for each community, education for homeowners

Unique Ideas for Actions and Resources

- Key Actions/First Steps: Prescribed burns, create buffers around a community, identify safe places in each community, address recovery as part of adaptation
- Additional Partners / Roles: Schools, Port, NGOs, Chambers, Land Trust, Tribes
- Resources: Insurance companies, interactive map

Coordinate ecological recovery programs for areas subject to fire in forested and shrub-steppe lands

Common Themes

Collaboration with local efforts

Unique Ideas for Actions and Resources

- Key Actions/First Steps: Seed program, list of priority recovery/rehab areas, for wildlife provide assistance over winter + protect orchards, understand fire and shrub-steppe habitat (can be just as high impact as crown-driven forest fire)
- Additional Partners / Roles: North Central WA Forest Health Collab., local firm for native plants, environmental non-profits who are already doing restoration work (Trout Unlimited, Rocky Mountain Elk Foundation), agriculture organizations (commodity groups, e.g. tree fruit), local and state governments
- Resources: Planning and reserve funding

Proactively address fire resiliency through activities such as: pre-fire monitoring, maintenance/forest treatment, thinning, prescribed fire, and managed natural fire

Common Themes

Inventory and mapping.

Unique Ideas for Actions and Resources

- Key Actions/First Steps: Thinning prescription for properties, access and road maintenance
- Additional Partners / Roles: Farm Bureau, WSU Ag center in Wenatchee, Washington State Parks

Key Action: Need woodchippers that can be used to reduce fuels, rotated around communities. Chipping can be easier to accomplish than burns

Key Action: Education and work around how forest health = community health. Thinning and prescribed burn has input all down the chain with regard to streams, health of people, GHG emissions mitigation and prevention. Resources: Cost Sharing model – thinning where logs go to pay for logging, environmental groups funds – Sierra Club, foundations, etc., grant writing

Air quality: education, training, and responses to protect people and communities during and after wildfire

Common Themes

Distinguish and educate about wildfire, controlled burns, other.

Unique Ideas for Actions and Resources

- Key Actions/First Steps: Inventory of cleaner air shelters
- Additional Partners / Roles: Washington Department of Ecology, Chambers of Commerce
- Resources: Evaluating alternatives to burning way to further incentivize chipping and composting

WATER RESOURCES: SNOWPACK & STREAMFLOW

Across all the groups each draft strategy was addressed with the greatest dialogue about the "checked" strategies:

✓ Collect local data to support climate resiliency including weather stations/SNOTEL, seasonal wind patterns, etc.

Identify and support data collection opportunities to quantify forest management effects on snowpack in order to support development of forest-snow-streamflow model. (one group lightly addressed)

- ✓ Encourage watershed-scale community building to adapt to changing streamflow and snowpack within the watershed. For example:
 - Irrigation efficiencies and returning diverted water back into streams during critical flow periods.
 - Forestry practices and riparian enhancement that improve water-holding capacity and reduce stream temperatures.
 - Critical areas restoration to maintain or reduce stream temperatures, and restore flow patterns.
 - Management of invasive or non-native aquatic species that thrive in warmer waters.
 - Prioritization of water use as snowpack decreases

Promote and encourage water efficiency and conservation (one group lightly addressed)

Reduce impacts of climate change to aquatic systems through stream-habitat improvement and connectivity (one group lightly addressed)

Collect local data to support climate resiliency including weather stations/SNOTEL, seasonal wind patterns, etc.

Common Themes

- Increase stations.
- Look to other jurisdictions, e.g. British Columbia.

Unique Ideas for Actions and Resources

- Key Actions/First Steps: Lessons learned from other jurisdictions who have expanded observations. Streamflow gauges could be used to validate SNOTEL observations, through correlations with low & high streamflow patterns. Form a technical committee comprised of agencies collecting data to identify what is collected and what gaps need to be filled and provide an accessible repository.
- Additional Partners / Roles: Colorado NRCS, NWAC, UW Atmospheric Sciences and CIG, University
 of Nevada Reno, State DOTs that keep winter passes open year round (e.g. Red Mountain Pass in
 Colorado), British Columbia Ministry of the Environment, Forest Landowners, Trout Unlimited and
 Nature Conservancy
- Resources: Similar to strategy funding for infrastructure. Permitting will also be required.

Encourage watershed-scale community building to adapt to changing streamflow and snowpack within the watershed.

Common Themes

Working group to improve collaboration and ensure progress.

Unique Ideas for Actions and Resources

- Key Actions/First Steps: In logged areas or areas w/ floodplain incision & disconnection complete eluvial projects, beaver dam analogs. Have more pilot projects on the ground. Do pre-monitoring. Model sharing agreement.
- Additional Partners / Roles: North Central Washington Forest Health Collaborative, Private landowners, Tribes, non-profits, and similar to those on strategy above.
- Resources: Similar to draft strategy to leverage watershed plans.

WATER RESOURCES: FLOODING

Each draft strategy was addressed with one group, with the "checked" the most discussed:

 \checkmark Improve flood warning and information dissemination

Assess risk management, and prepare for rapid response during the flood event (lightly addressed)

Evaluate and improve stormwater management and infrastructure for high-intensity rainfall events (one group lightly addressed)

- Protect and upgrading or relocation of vulnerable critical facilities locations vulnerable to flooding
- ✓ Revise transportation infrastructure:
 - \circ Improve transportation infrastructure where needed, e.g., enlarging road crossings
 - Remove or redesign roads that disrupt floodplain function or intercept precipitation and ground water and accelerate its movement into stream systems
- ✓ Plan for post-flood restoration. Replant bare, disturbed, and recently burned areas to increase infiltration and slow movement of water. Provide restoration to stabilize ecosystems.

As there was one group, common themes are not identified, but unique ideas that advance the strategies are noted.

Improve flood warning and information dissemination

Unique Ideas for Actions and Resources

- Key Actions/First Steps: Set up a system for those without phone, internet or social media? Address Post fire flooding impacts.
- Additional Partners / Roles: In addition to those in strategy, Community Organizations who have connections with targeted outreach groups. Spanish speaking communities.
- Resources: Increased partnerships. Floodplain by Design (maybe have existing funding or resources)

Key Actions: Address Post fire flooding impacts.

- Fire generated flooding events (already happened twice)
- Potentially more impactful

Protect and upgrading or relocation of vulnerable critical facilities locations vulnerable to flooding

- Key Actions/First Steps: Assess current state of vulnerable infrastructure. Avoid putting infrastructure in floodways, and explore opportunities to remove infrastructure and vulnerable facilities from floodplain. Acquire private land where there is repeated impacts from flooding. Need to address toxic or potentially toxic locations Underground storage tanks (EPA tool that overlays) and hazardous waste site.
- Additional Partners / Roles: Corps of Engineers, sewage treatment plant, businesses (because highly impacted), residents in low lands.
- Resources: FEMA hazard mitigation, BRIC funding; Floodplain by Design. Washington Department of Ecology.

Revise transportation infrastructure

Unique Ideas for Actions and Resources

- Key Actions/First Steps: Analyze the road network prioritize. Review WA State Dept of Infrastructure Road chronic deficiency program. Substantive long term fixes – not Band-Aid.
- Additional Partners / Roles: FHWA, Chelan Douglas Regional Transportation Council.
- Resources: Federal highways. Federal climate change funding mitigation funding. Chelan Douglas Regional Transportation Council. Salmon recovery, leverage fish passage.

Plan for post-flood restoration. Replant bare, disturbed, and recently burned areas to increase infiltration and slow movement of water. Provide restoration to stabilize ecosystems.

Unique Ideas for Actions and Resources

- Key Actions/First Steps: Mitigate for action post flood do significant mitigation for actions that happen during the flood. Issue emergency HPA Post flood issuance HPA to evaluate emergency actions and require mitigations. Identifying areas where flooding is appropriate and make sure those areas are "flood" ready.
- Additional Partners / Roles: NRCS may be able to assist to engineering/support.
- Resources: Similar to draft strategies.

WATER RESOURCES: SUPPLY

Draft strategies with the most dialogue include those "checked":

- Develop rural water management through water budgets, exempt well tracking, voluntary metering, water banks, water markets, or other measures (One group discussed)
- Promote increased water storage solutions that help agricultural producers adapt to changing conditions and decrease production losses due to lack of water availability (not addressed)
- Consider greywater systems and water re-use (One group addressed)
- ✓ Agricultural and municipal water conservation and efficiency efforts in watersheds where these conservations efforts can lead to overall decreases in water demand

Drought planning to increase water conservation, plant drought-tolerant species, and build awareness around individual risk from drought (One group discussed)

Agricultural and municipal water conservation and efficiency efforts in watersheds where these conservations efforts can lead to overall decreases in water demand

Common Themes

Loop in conservation districts and increase in conservation practices.

Unique Ideas for Actions and Resources

- Key Actions/First Steps: Irrigation districts conservation plans provide support for these efforts that increases the way climate change is accounted for in those plans. Incentives – low water use landscaping (Moscow, ID as an example), low flow indoor plumbing fixtures, drip irrigations systems, orchards – dense spacing of trees, incentives for PUD to decrease non-revenue water.
- Additional Partners / Roles: Conservation District, Trout Unlimited, Chelan County, Chelan PUD municipal provider
- Resources: Support for Education/Outreach (WA DOE may have funding)

Other Water Supply Ideas

While groups only covered one topic in common, other ideas regarding water management, greywater, and drought planning:

- Water Management: Prioritization for assessing water use in areas where water use is most critical, where growth is occurring fastest, and where we expect climate impacts to be the most extreme.
- Greywater: Gather (existing?) data on contaminants in water (e.g. microfibers) and what can be done to mitigate impacts (e.g. filtration?).
- Drought Planning: Natural water storage (beaver dam, floodplain restoration), soil health (conservation practices), need implementation resources (e.g. alluvial water storage).

PUBLIC HEALTH AND SAFETY/VULNERABLE POPULATIONS

Each draft strategy was addressed but those with the greatest dialogue included those "checked":

- Assess the capacity of health systems to respond to emerging health and safety threats and to integrate climate preparedness into their hazard response plans and daily operations
- Develop priorities and strategies to proactively implement climate change adaptation measures for the most vulnerable and underserved populations
- Build capacity to assist the most vulnerable people and communities to prepare and respond to threats such as wildfires and flooding.

Key Action: Reach out to individuals through faith and other organizations, and look at needs beyond health care (SDOH).. Look at language/ communication issues too. Focus on vulnerable communities, including smaller communities, growth, needs in the future, assessing culturally appropriate communications.

Identify locations where changes in surface and groundwater flow due to climate change (e.g., larger floods, erosion, fire) could result in new or greater releases of toxic substances to the environment (one group lightly addressed)

Assess the capacity of health systems to respond to emerging health and safety threats and to integrate climate preparedness into their hazard response plans / operations

Common Themes

- Identify the range of health risks
- Understand health burden and capacity of health system
- Identify community-based organizations working with vulnerable populations

Unique Ideas for Actions and Resources

- Key Actions/First Steps:
 - Encourage providers to adopt policies that would encourage more access to health care, such as mobile, less-formalized services.
 - Develop plan for undocumented workers so they can be assured they will be kept safe when seeking treatment. This summer there were over 200 farmworkers that had to sleep in a local park during a wildfire. Some care is already provided but there may be disconnects....
 - ^D Identified gaps are reflected in new epidemic plan updates.
 - Identify who is responsible for healthy work conditions (e.g., employer, broader associations that represent employees?)
- Additional Partners / Roles: In addition to health care providers and health district Potential grocery store chains (re: Food Security); Social service agencies (e.g., Wenatchee Homelessness Coalition; Women's Resource Center; Food Banks; Community Gardens); Mental Health Services; Employers and associations that represent sector employees; Wenatchee Valley College; Sustainable Wenatchee; Parque Padrinos, CAFÉ, Hand in Hand Immigration Services
- Resources: Public services and volunteers.

Develop priorities and strategies to proactively implement climate change adaptation measures for the most vulnerable and underserved populations

Common Themes

- Coordination of communication.
- Capacity and extent of infrastructure/transportation infrastructure.
- Access to health care.

- Key Actions/First Steps: PPE, measuring smoke, capacity of emergency response units. Include communication through education/school systems include school districts.
- Additional Partners / Roles: Similar to draft strategy.

Resources: Need to ensure there is a budget to ensure that this work can be done effectively, and actually engages the vulnerable populations.

ORGANIZATIONAL STRUCTURE/COMMUNICATION AND ENGAGEMENT

Across all the groups each draft strategy was addressed:

- ✓ The Climate Round Table will be open to anyone with an interest in climate resilience. The Climate Round Table will help prioritize and coordinate strategies and actions, and leverage existing resources. ...
- ✓ Education and outreach on collective and individual efforts to address water conservation, energy conservation, and fire and flood preparedness
- Ensure climate resilience outreach and education efforts are multi-lingual to engage all members of the community

Round Table Strategy

The Climate Round Table will be open to anyone with an interest in climate resilience. The Climate Round Table will help prioritize and coordinate strategies and actions, and leverage existing resources. A "Science Advisory Committee" will provide technical advice to the Round Table and Executive Committee. An Executive Committee made up of a core group of the Round Table will be nimble and help carry out the Round Table direction. The Round Table and Executive Committee will be supported by an Administrator and an Outreach Team. An early action of the Round Table would be to prioritize strategies ... and delegate actions ...

What are deliverables of Round Table? E.g. outreach materials for use by multiple entities.

Who will administer/staff?

Concern on Round Table – so many interests, how to ensure impact on resilience?

Common Themes

 Define Round Table and Supporting committees. Make meaningful. Make diverse and collaborative. Address the gaps.

- Key Actions/First Steps: Develop draft charter for Round Table and supports. Ensure there are metrics for each strategy – what are we measuring – across all sectors. Make media materials "tell it like it is", honest, clear, and in various languages. Publish a monthly article in Wenatchee World.
- Additional Partners / Roles: How to get new actors to participate? See all "roles" across all sectors and strategies listed in appendix.
- Resources: Identify funding so all can participate. Best way to meet/participate. Assure agency staff are available to engage.

Education and outreach on collective and individual efforts to address water conservation, energy conservation, and fire and flood preparedness

Common Themes

Start with existing plans, leveraging existing programs.

Unique Ideas for Actions and Resources

- Key Actions/First Steps: Approach what is most broadly accepted in the community first, resiliency, focus on economic impact, fire adaptation/prevention. Determine which area to start, such as transportation. Reducing carbon footprint, need to prioritize, look at cost share programs to make them firewise, bolster existing programs and topic leads.
- Additional Partners / Roles: Similar to draft strategy.
- Resources: Start engaging in activity find resources.

Ensure climate resilience outreach and education efforts are multi-lingual to engage all members of the community

Common Themes

 Work with partners who have accomplished multilingual outreach (e.g. Health District and School District).

Unique Ideas for Actions and Resources

- Key Actions/First Steps: Hold a separate Spanish speaking roundtable. Build in time to plan for and complete translation. Can result in shortened timelines for development of work products. Review successful models – e.g. Wenatchee School District.
- Additional Partners / Roles: County, Cities, School Districts, CAFÉ', Parque Pardinos, etc.
- Resources: Similar to draft strategy.

POTENTIAL STRATEGY AMENDMENTS

As the groups were developing actions, first steps, roles, and cost/resources, several groups identified some potential strategy amendments, generally to make them more inclusive of related topics.

Wildfire

Continue to build partnerships across agencies <u>and broader groups including the public</u> to monitor and respond to climate changes and vulnerabilities in forested and shrub steppe lands)

Snowpack & Streamflow

Collect local data to support climate resiliency including weather stations/SNOTEL, seasonal wind patterns, etc. and streamline data gathering amongst organizations

Flooding

Protect, and upgrad<u>eing</u>, or relocat<u>eion of vulnerable critical facilities locations vulnerable to flooding including toxic or potentially toxic locations</u>

Water Supply

Develop rural water management through water budgets, exempt well tracking, voluntary metering, water banks, water markets, or other measures <u>(understanding how much water is being used for agriculture and domestic use where it is being used)</u>

Organizational Structure / Communication and Engagement

Education and outreach on collective and individual efforts to address water conservation, energy conservation, <u>economic vitality</u>, and fire and flood preparedness.

Merge this strategy with education and outreach strategy above: Ensure climate resilience outreach and education efforts are multi-lingual to engage all members of the community.

NEXT STEPS

To advance the draft Climate Resiliency Strategy, Chelan County and partners will consider the input at the December 2020 Climate Resilience Action Planning Workshops.

Next steps include:

- Form the Round Table.
- Review results of the workshop as well as strategies that were not fully vetted by the groups.
- Formalize the strategy with the Board of County Commissioners.
- Seek funding such as with the legislature.

ATTACHMENT: RESOURCE NAMES – ALL STRATEGIES

To assist with strategy implementation or Round Table invitations, the names of entities in the strategy and identified by the groups at the December 2020 workshops are listed.

4H	Chelan Douglas Land Trust
Academia /Education	Chelan Douglas Regional Transportation Council
Agricultural Producers	Chelan PUD
Associations that represent sector employees	Chelan, city
British Columbia Ministry of the Environment	Chumstick Coalition
Builders	Chumstick Wildfire Stewardship Coalition
Bureau of Reclamation	Cities
Businesses	Cities' Public Works Departments
CAFÉ	CO Natural Resources Conservation Service (NRCS)
Cascadia Con	
Cascadia Conservation District	Community Based Organizations
Cascadia Fish Enhancement	Community Gardens
Cashmere	Community Groups – Fire Adaptive & Fire Wise
Cattlemen's Association	Community Organizations/NGOs
CDC	Company in Chelan County that already does native plants – can we partner
Chambers of Commerce	Confederated Colville Tribes
Chelan Co. Fire Marshall	Confluence
Chelan Co. Flood Control District	Confluence Hospitals
Chelan Co. Natural Resources Department	Conservation districts
Chelan Co. Noxious Weed Board	
Chelan Co. Public Works Departments	Corps of Engineers County
Chelan County	
Chelan County Community Development Department	CVCH (FQHC) Educational systems
Chelan County Emergency Management	Elected officials not from legislative district
Chelan County Fire Marshall	Emergency management team – fire dept, sheriffs, firewise leads
Chelan County Natural Resource Department	
Chelan County Public Works	Employers
Chelan Douglas Community Action Council	Entiat
Chelan Douglas Health District	

Environmental nonprofits who are already doing restoration work	Major Growers
Farm Bureau can take on projects to help	Master Gardeners
	Mental Health Services
Federal Highways Administration	Municipal Service Providers
FEMA	Municipal Water Providers
Financial institutions	Municipalities and Councils
Fire Departments	Natural Resources Conservation Service (NRCS)
Fire District #1	Nature Cons.
Fire District #3 Greater Leavenworth	NCW Forest Health
Fire Districts	New residents
Food Banks	NGOs and community support groups (service
Forest Service	groups)
FRBSF	NOAA
Grocery store chains (re: Food Security).	Non-Governmental Organizations
Group municipal systems outside of the cities	North Central WA Forest Health Collab.
Hand in Hand Immigration Services	North Central Washington Forest Health
HCA	Collaborative
High Schools	NRCS
ILSG	NRCS
Independent Water Districts	NWAC – northwest avalanche center
Indian Health Service	Orchard owners to minimize damage
Individual city planning and building	Organizations serving vulnerable populations
departments	Parque Pardinos
Individual landowners	Permitting agencies (Fed, State, Local)
Irrigation and Reclamation Districts	Port District
Irrigation Districts	Public Information Officers
Large Forest Landowners	PUD
Leavenworth	Red Cross
Local Chambers of Commerce (Lake Chelan, Leavenworth, Wenatchee)	Red Mtn Pass in CO (State DOTs that keep winter passes open year round)
Local police	Residents
Long term care facilities	Rocky Mt Elk Foundation
Major Employers	School Districts

Serve Wenatchee Valley (faith org) WA Farm Bureau Sewage treatment plant WA Fire Adapted Communities Network Sheriff's Department WA State Tree Fruit Association plus other food associations Social Organizations, e.g. Rotary, Kiwanis WAFAC Social service agencies Washington State Parks Social service agencies (DHHS) WDFW Spanish speaking communities – and those who can help to outreach to Spanish speaking WDNR communities. Wenatchee Homelessness Coalition Sustainable Wenatchee Wenatchee Valley College (esp. w/ regards to **Telecommunication Providers** outreach to vulnerable populations) Tribal health (Colville) Wheat (Washington Grain Commission) Women's Resource Center Tribes **Trout Unlimited** WSDOT USEPA WSDOT chronic deficiency program **U.S.** Forest Service WSU – tree fruit research UCSRB WSU Ag center in Wenatchee University of Nevada (RENO) - specifically for WSU Forestry Extension – programs for expanding snow science observations developing prescriptions on private land Yakama Nation University Researchers Upper Columbia Salmon Recovery Board USACE USDA RD USFS USGS **UW** Atmospheric Sciences UWCIG WA Dept. Fish & Wildlife WA Dept. of Ecology WA Dept. of Ecology Office of Columbia river, Water Resources Program WA Dept. of Ecology's municipal stormwater program. WA DNR