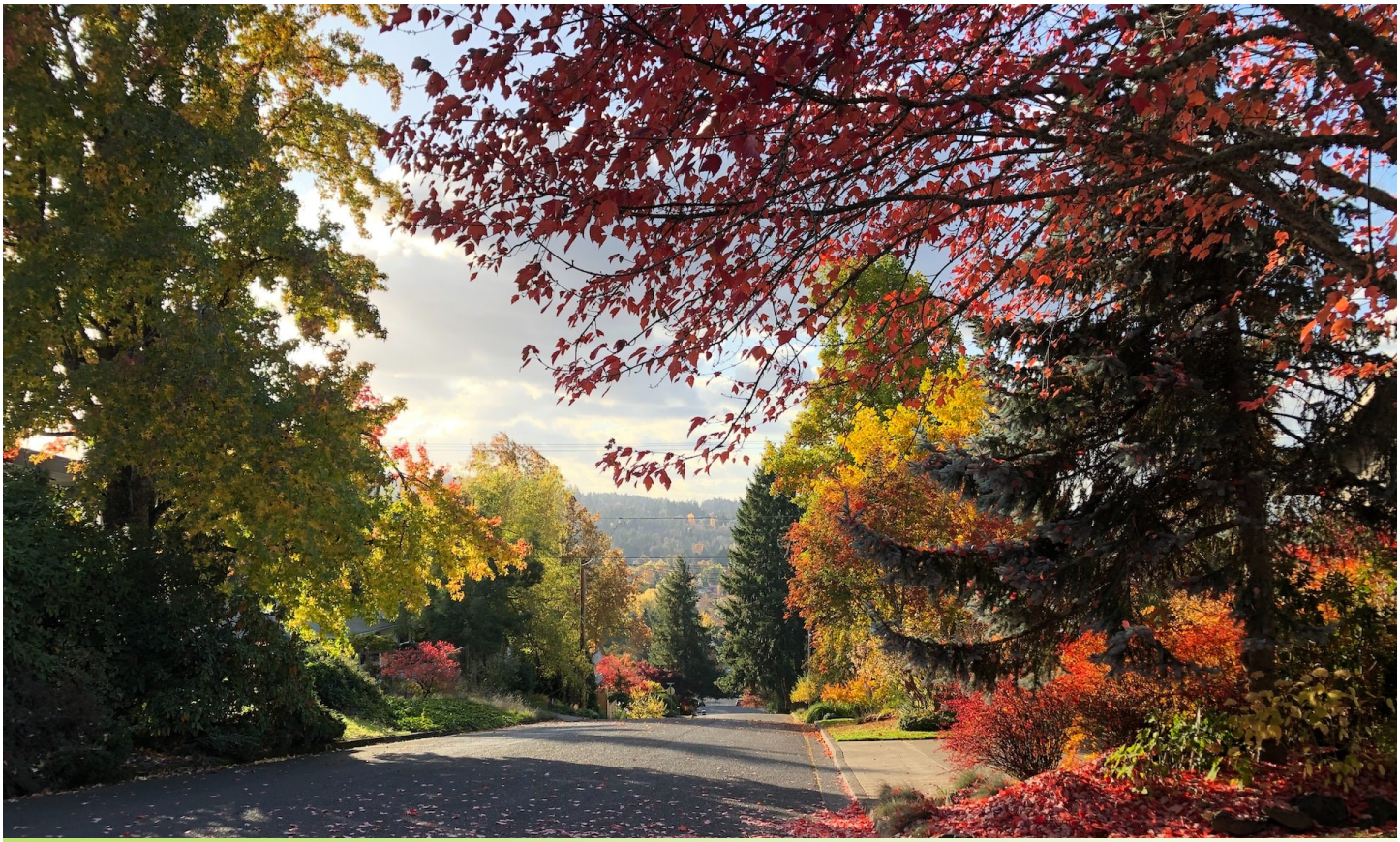

Executive Summary

This report summarizes the effort over the past two years to understand changing climate conditions across Lane County, identify vulnerabilities specific to frontline communities, and develop solutions that center the needs of those communities. Beyond Toxics has worked in partnership with Lane County throughout this process and is pleased to see that many of the strategies identified in this community-led process have been incorporated into Phase 3 of Lane County's Climate Action Plan.

Beyond Toxics will continue to partner with community members, other organizations, and Lane County to guide implementation of the Climate Action Plan, identify other opportunities to move climate resilience strategies forward, help the community identify emerging climate impacts over time, and lead implementation of strategies that must be led by community organizations. Together, we will ensure a climate resilient future for all who call Lane County home.

Equity

Equity is a bedrock principle of the Climate Equity and Resilience Task Force and a primary driver of this community-led process. It is widely recognized that changing climate conditions disproportionately impact community members who are already struggling due to low-income, historic and current inequities, age, disability, existing medical conditions, and other characteristics. Building climate resilience in an equitable way requires that the needs of these populations be centered in the process of identifying vulnerabilities and developing strategies to address them.

Future Climate Change Projections

Climate change is affecting communities and natural resources around the globe. The climate change conditions that residents of Lane County experience will continue to change in coming decades. In 50 years, for example, Eugene will be similar to today's Sacramento (6.6° F hotter and 40% drier on average).

Climate Vulnerabilities and Community -Driven Strategies

As changes in climate continue, residents can expect increasing severity and frequency of extreme heat and wildfire, larger storms with more precipitation, more

When compared to the historical period (1961-1990)...

By the middle of this century (2040-69), Lane County is expected to experience:

- 4-7° F warmer average temperature
- Approx. 31 more days/yr. above 90° F in Eugene
- 47-69% less snowfall
- Increased drought stress
- Summer days 5-9° F warmer

By the end of this century (2070-99), if emissions are unabated, Lane County is expected to experience:

- 7-10° F warmer average temperature
- Summer days 7-14° F warmer
- Approx. 58 more days/yr. above 90° F and 21 more days/yr. above 100° F in Eugene
- 67-85% less snowfall
- Increased drought stress
- Increased risk of very large wildfires

prolonged periods of drought, declining snowpack, and significant changes to the forests, rivers, coastal areas, and other natural features in and around Lane County.

In this process, community members reviewed the future climate projections and identified ways in which communities across Lane County would become more vulnerable due to climate change. Once those vulnerabilities were identified, community members developed strategies to address the vulnerabilities that would have the greatest impact on residents, particularly members of frontline communities.

For each vulnerability, the process identified at least one primary strategy and developed additional information, including equity considerations and co-benefits, for that strategy. This report identifies the vulnerability, at least one primary strategy, additional information, and other possible strategies that may be employed to address each vulnerability.

These strategies were submitted to Lane County for consideration in its climate planning process. The community-based strategies that were integrated into the Lane County Climate Resilience Plan are identified below with an asterisk.

Vulnerability	**Strategy**
1. Threat of wildfire to homes and businesses	Strengthen programs to help people reduce wildfire risks to homes and businesses*
2. Higher rates of stress and mental health concerns leading to increased crime and violence due to all climate hazards	Develop community or neighborhood-based support programs*
3. Health risks to the general public (especially those with underlying health conditions) from smoke and extreme heat	Build community resilience hubs for supplies, programs, and resources*
	Develop more emergency health and smoke shelters with transportation assistance to get to the shelters, including education and resource sharing spaces in shelters, libraries, schools, senior centers, faith-based institutions , etc. Investigate the possibility of creating mobile options and resilience hubs as well as helping particularly vulnerable residents access free or low-cost air filtration programs.*

Vulnerability	Strategy
4. Health risks to outdoor workers due to wildfire smoke and extreme heat	Ensure protection and implement support for new worker protections (especially undocumented workers)*
5. Threats to the power grid causing blackouts, brownouts, and health threats	Work with utilities to ensure resilient power supply across county while helping homeowners reduce their energy needs through weatherization and energy efficient electrification of their homes*
6. Existing lack of personal preparedness for emergencies and evacuations made worse due to multiple climate hazards	Develop comprehensive, multi-pronged public engagement programs about emergency preparedness and evacuation procedures*
7. Health risks from reduced water quality in wells	Provide testing assistance and education about well safety for homeowners, particularly in rural communities and especially during drought and after wildfire*
8. Housing supply availability and cost issues due to climate refugees, the existing housing shortage, and the need to repair damage from previous disruptions, especially for low-income and middle housing	Expand housing stock to meet low-income and middle housing needs while making it more resilient.*
9. Decreased potential for self-sustainability and ability to grow own food, especially in rural areas, due to wildfire, drought, and increased heat	Strengthen food security by supporting local food production and distribution while supporting regenerative, ecologically sound farming practices*
10. Cost of living increases (food, supplies, energy, healthcare, water, etc.) leading to financial and housing instability	Increase workforce development programs for needed trades, particularly building and construction, to ensure local workers have employment that allows them to be financially stable*
11. Increasing demands on public safety and social service providers due to all climate hazards	Develop community and neighborhood-based programs to support residents, including mental health support programs*

Vulnerability	Strategy
12. Increased costs for property and liability insurance due to wildfire and larger storms	Assist residents with building retrofits, vegetation control, and education regarding existing structures in order to reduce risk*
13. Loss of marine life due to water quality and ocean acidification	Advocate for the maintenance and improvement of coastal wastewater treatment facilities, including septic systems
14. Indigenous communities unable to access traditional resources and hold ceremonies or community events due to all climate hazards	Advocate for a Tribal Liaison position at Lane County
15. Schools closed due to extreme heat and smoke	Advocate for school districts throughout Lane County to upgrade infrastructure to maintain air quality in terms of both extreme heat and wildfire smoke
16. Transportation and transit times may increase due to higher demand from a larger population and disruptions from extreme events	Advocate for and support public transportation infrastructure development along high use routes
17. Supply chain breakdowns and price increases due to disruptions particularly affecting construction of low-income and middle housing	Advocate in economic development planning processes for regional and local production of building products (e.g. Cross Laminated Timber)
18. Lack of water access and yearly variation in snowpack	Establish alternative water access and storage including backup systems in case of emergency
19. Loss of health coverage due to disruptions in employment	Advocate at the Oregon Legislature for immediate access to free or low-cost medical providers through the Oregon Health Plan when employment is disrupted due to natural disasters
20. More injuries and deaths due to all climate hazards	Advocate at the state level for local hazard mitigation plans to address climate change impacts.

Vulnerability	Strategy
21. Farming, ranching, and forestry threatened by drought, temperature variability, and wildfire	Increase funding for local farming and self -sufficiency by increasing the connection between local farmers and the County
22. Exacerbates existing lack of emergency evacuation plans	Develop comprehensive public engagement efforts to strengthen emergency evacuation plans and help residents have an emergency preparedness plan in place for themselves and their community

Small Woodland Owner Strategies

How small woodland owners manage their lands has a significant impact on wildfire risk across the county. Building materials will continue to be needed in the region and responsible management of these lands can protect biodiversity as natural systems are also impacted by rapidly changing climate conditions. Possible strategies identified in this process to assist small woodland owners in building climate resilience include:

- Increase education around forestry literacy to the public
- Build community outreach networks and resources for generational foresters and foresters who are in new ownership of forested lands
- Collectivize seedling purchase.
- Afforestation for public rights of way
- Allow eco-forestry villages on F-2 land to expand how communities and people have the access to live and work in forests
- Develop a business accelerator for forestry and forestry-related business and build workforce development communities at the high school and college levels
- Hire a forestry specialist to write grants, track federal funding opportunities, and develop and implement practices and programs to increase opportunities for carbon sequestration on forest lands in Lane County to address climate risk, while enhancing rural economic health by securing federal and state funding to support local community projects in Lane County
- Prevent land conversion to non-forest uses in County's land use policies
- Provide a calculation for a comparison of cost versus profit from slash burning and biochar
- Seek funding for pilot projects that investigate the efficacy of fireboxes that burn slash on site without open smoke to reduce trucking diesel pollution and improve overall rural air quality
- Provide funding to expand fire prevention, protection, and reforestation

after fire events and management activities

- Incentivize woodland owners to shift away from clear cutting, but to do pre-harvest cuts and manage for multi-age stands
- Bring Lane County elected officials to foresters' land as that contributes to better understanding of the issues facing forestry enterprises in Lane County
- Manage county park land for increased tree canopy and conservation
- Update the County's Procurement Policy to buy local, ecologically managed lumber and paper products

Next Steps

By identifying a primary strategy and several other options for each of the high priority community vulnerabilities, this document provides many ways in which the community can move forward with the help of local government to build climate resilience.

In the instances where Lane County has integrated a solution identified by the community into its Climate Action Plan, the focus will be on helping the implementation process. Alongside that work, advocacy efforts will be underway with Lane County and other governmental entities to address the remaining high priority vulnerabilities through either the primary strategy or other possible strategy options. As strategies are implemented and refined, the list of possible strategies included in this report can be revisited to determine if they are needed and worthy of investment.

Methods

Building on the community-led vulnerability assessment completed in partnership with Lane County, Beyond Toxics and Lane County hosted a Climate Resilience Strategies Workshop on June 25, 2022 at the Hilyard Community Center. Twenty-five community members participated in the workshop, which was facilitated by a team that included staff from the Geos Institute, Beyond Toxics, and Lane County.

Three additional community workshops were held after the initial workshop in order to engage with and gather feedback and ideas from residents across the geography of the County and specific communities of interest.

The 26 community members who attended the Vulnerability Assessment workshop, the 61 community members who attended the Strategies Development workshops and discussions, and the 349 community members who answered the survey provided valuable insight and made this community-led process possible.