

Addressing Rural EJ in the Context of Wildfire Risk



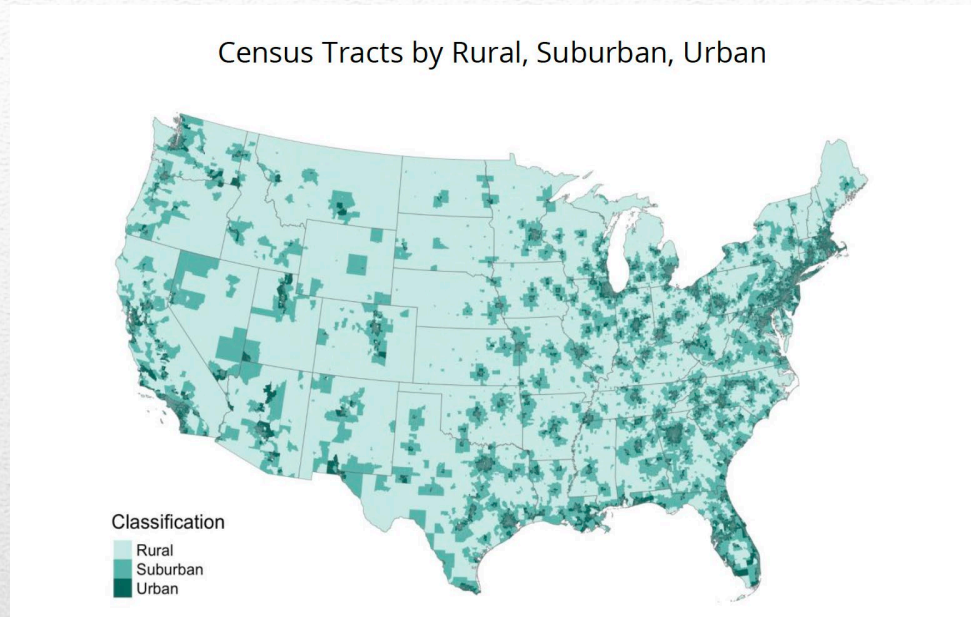
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What is rural?

- Low population density
- Land use: resource stewardship, extraction
- Land cover: vegetation, open space, undeveloped

Who is rural?

- Diversity— area-specific
- Native American/ Indigenous
- “Hidden” diverse populations



Paykin, S., et al. 2021. “Rural, Suburban, Urban Classification for Small Area Analysis.” Health Regions and Policies Lab, Center for Spatial Data Science, University of Chicago.

What/ who is rural?

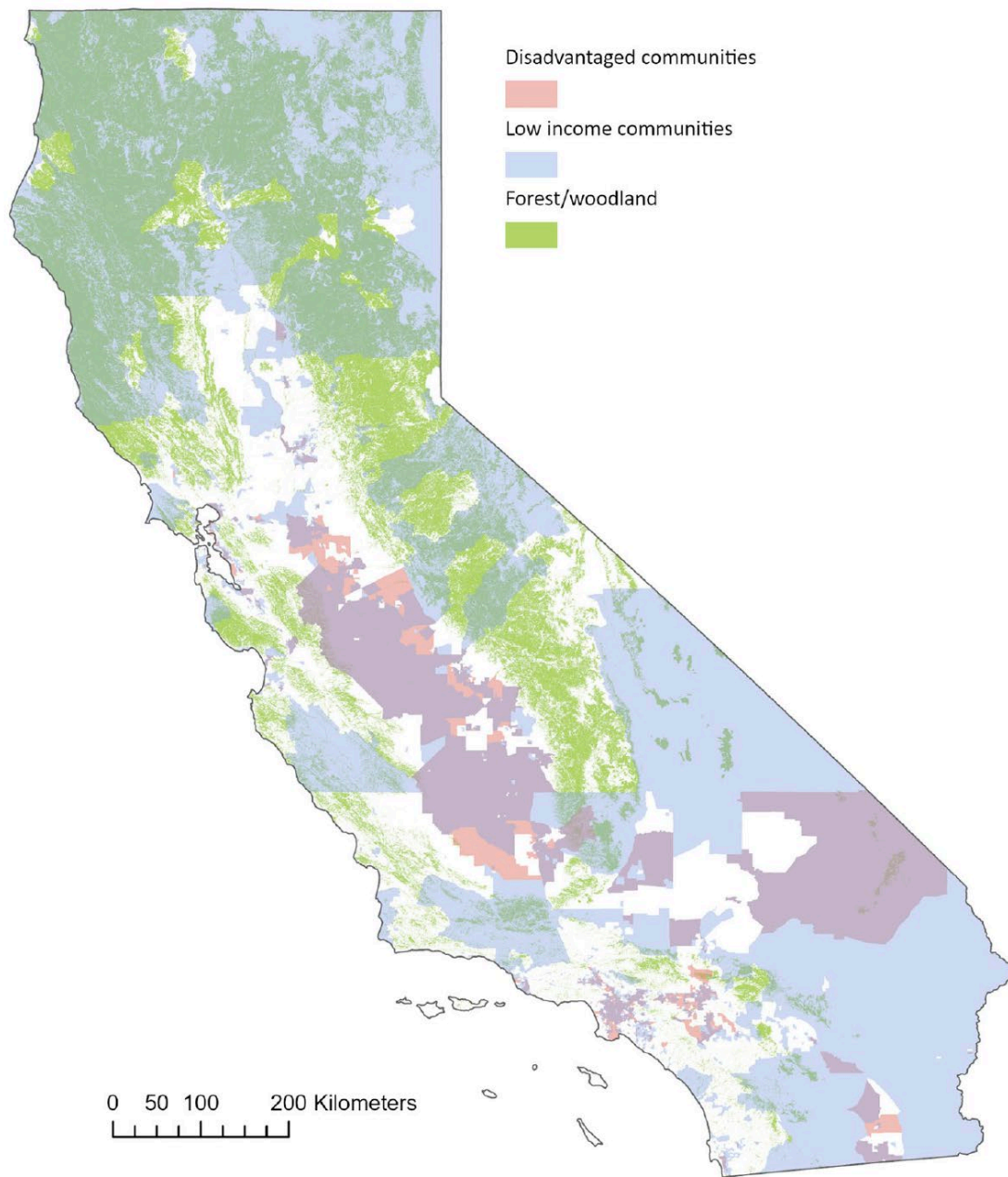


Figure 3. Forest and woodland areas of California according to CalFire (<https://map.dfg.ca.gov/metadata/ds1327.html>). Pink and blue shading show disadvantaged and low-income communities, respectively, based on CARB criteria.

Martinez, Deniss, Beth Rose Middleton, John Battles. 2023. "Environmental justice in forest management decision-making: challenges and opportunities in California," *Society and Natural Resources*.

***Environmental Justice (EJ)** is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies.*

***Rural EJ** is specifically attuned to the needs of rural populations impacted more significantly by fire (rural distributive injustice) and have less ability to influence policy to prevent megafires (rural procedural injustice). Despite mandates, there is limited attention to rural populations reliant on local resources; and the lack of investment in fire risk reduction planning.*

***Indigenous EJ** is specifically attuned to the needs of Indigenous populations impacted more significantly by fire (rural distributive injustice). Despite mandates, there is limited attention to Indigenous populations reliant on local resources; and the lack of investment in fire risk reduction planning.*

Environmental Justice in Rural Contexts

- **Vulnerability:** Likelihood of hazard, and factors that may reduce a community's ability to prepare for, withstand, and recover from catastrophic fire
 - Income/ “safety net”/ insurance
 - Personal demographics, including age
 - Social networks
 - Housing status (renter/ owner) and value
- **Adaptive capacity:** Ability to prepare for, withstand, and recover from catastrophic fire
- An asset-based approach begins with community strengths, which may include knowledge of local ecosystem, familiarity with escape routes, social network, high capacity for local community-based support structures
- *Given the destruction of communities in recent fires (i.e., 2021, Grizzly Flat, Greenville, Canyon Dam, Indian Falls), how might a focus on community assets support rebuilding fire-hardened communities with embedded systems of adaptive capacity and resilience?*

Defining rural vulnerabilities and assets to build adaptive capacity

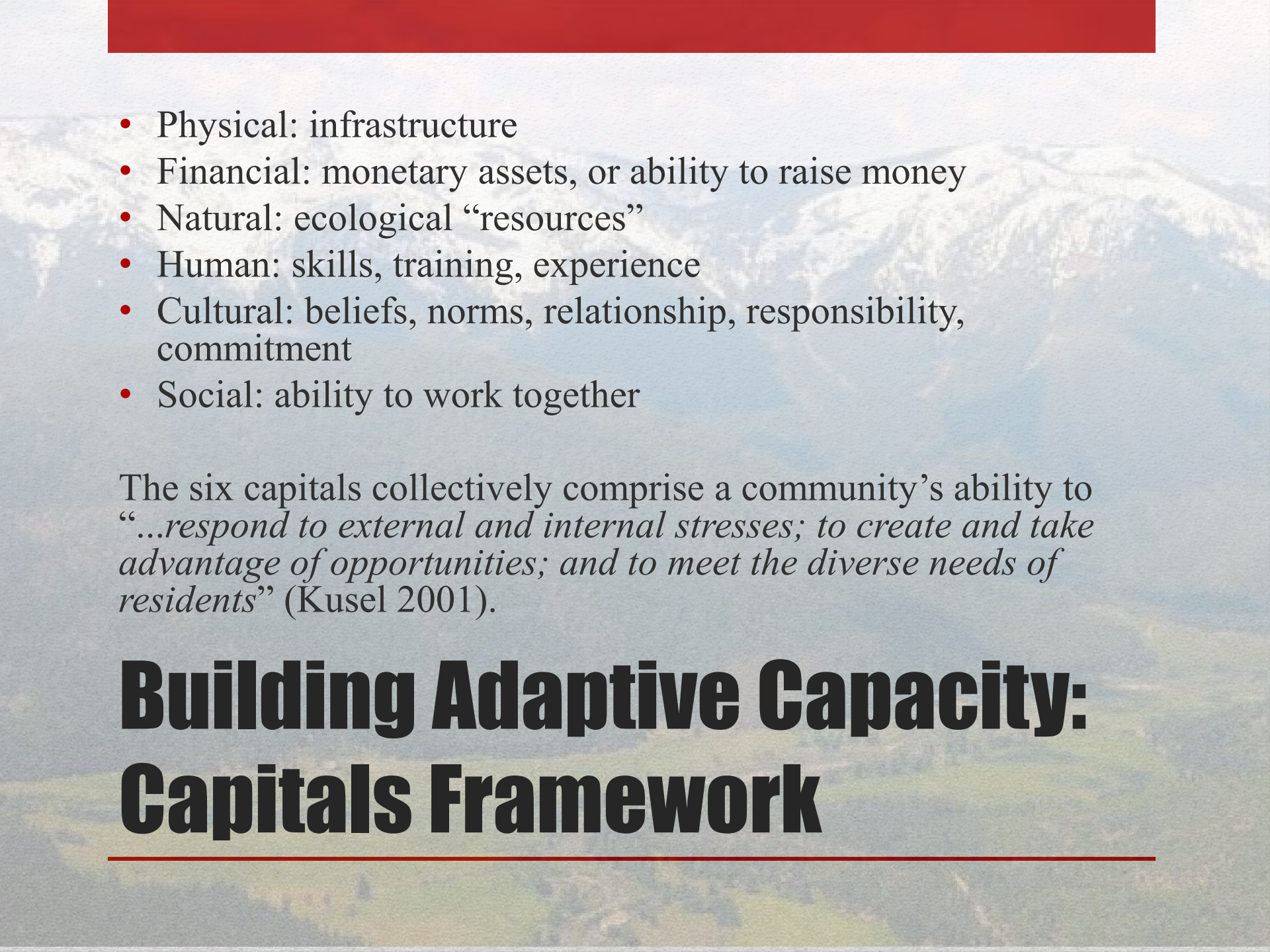


Above: Tribal-led implementation of prescribed fire in Karuk homelands (2016)

R: Representatives from First Nations Emergency Services and Greenville Indian Rancheria share tools for land stewardship planning (Fontana 2024)

Building Adaptive Capacity



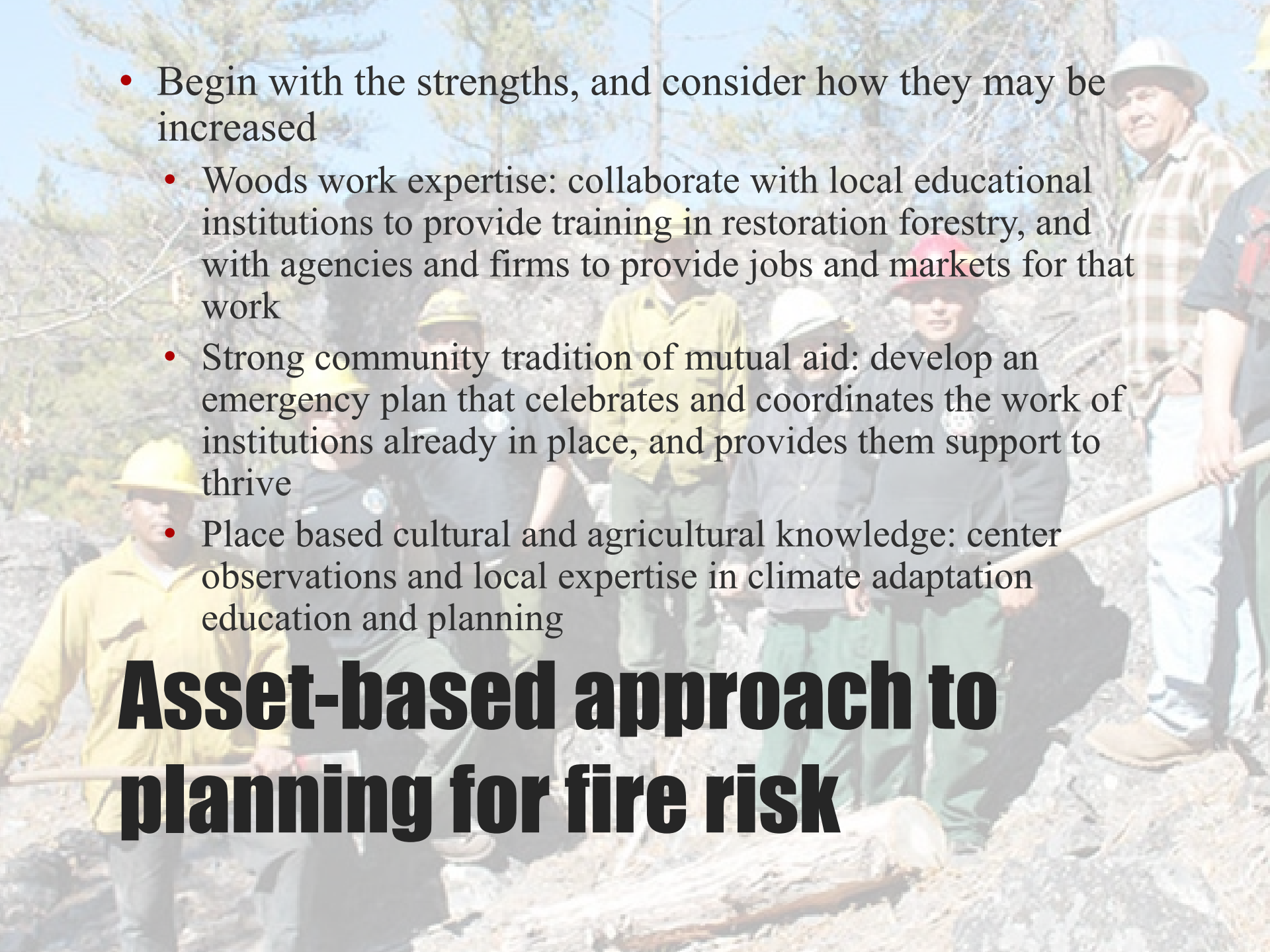
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- Physical: infrastructure
 - Financial: monetary assets, or ability to raise money
 - Natural: ecological “resources”
 - Human: skills, training, experience
 - Cultural: beliefs, norms, relationship, responsibility, commitment
 - Social: ability to work together

The six capitals collectively comprise a community’s ability to “...respond to external and internal stresses; to create and take advantage of opportunities; and to meet the diverse needs of residents” (Kusel 2001).

Building Adaptive Capacity: Capitals Framework

- How might the capitals (individually and collectively) build resilience to fire risk?
- If catastrophic fire has occurred, how have the capitals been impacted?
- How might the remaining/existing capitals be deployed to respond to ongoing/ future fire risk?
- **Who is at the table?** Models of inclusive planning address differential experience with fire risk

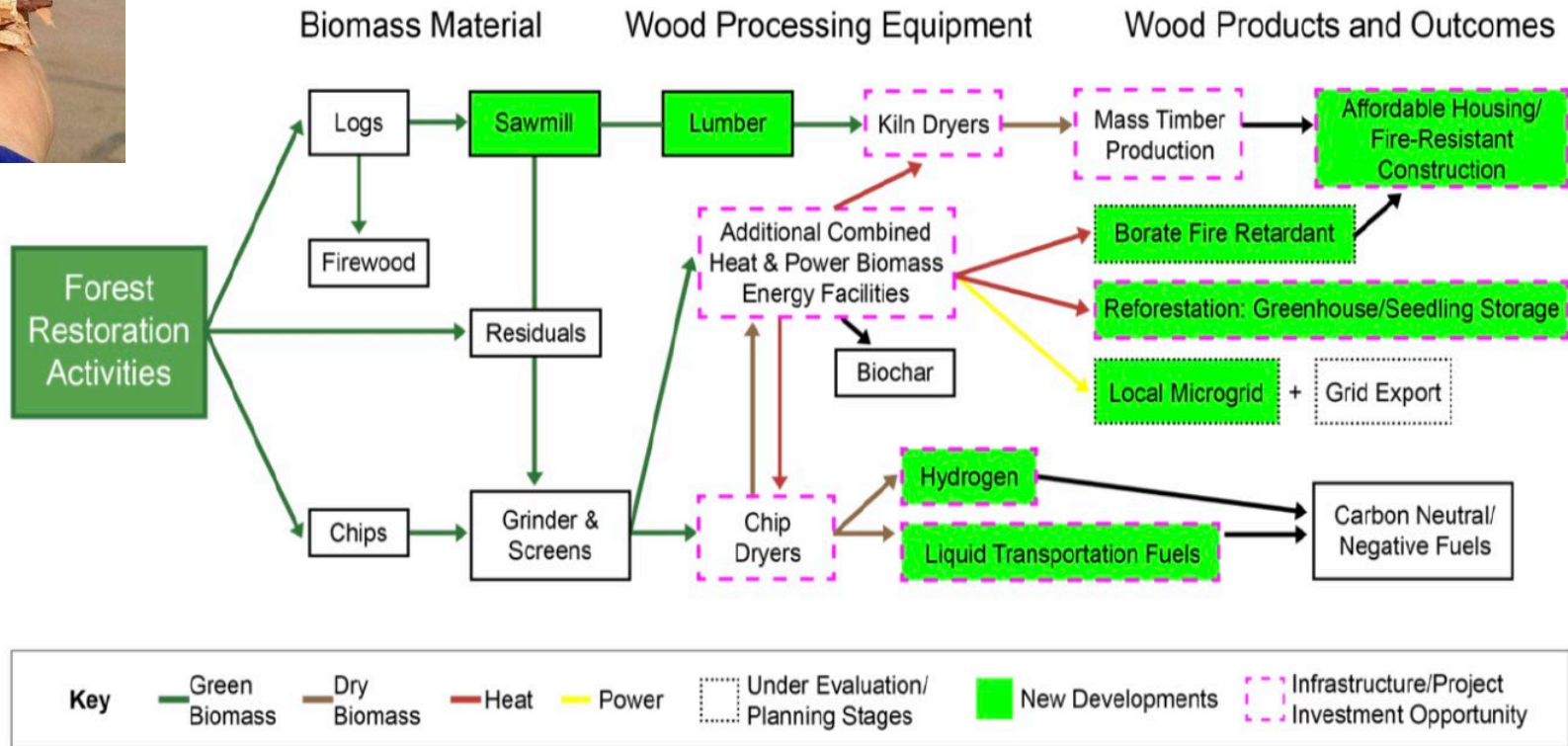
Linking capitals to risk

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- Begin with the strengths, and consider how they may be increased
 - Woods work expertise: collaborate with local educational institutions to provide training in restoration forestry, and with agencies and firms to provide jobs and markets for that work
 - Strong community tradition of mutual aid: develop an emergency plan that celebrates and coordinates the work of institutions already in place, and provides them support to thrive
 - Place based cultural and agricultural knowledge: center observations and local expertise in climate adaptation education and planning

Asset-based approach to planning for fire risk



Indian Valley Wood Utilization Campus Process Flow Diagram & Investment Opportunities





- Identify assets in a community (i.e., mutual aid, knowledge of landscape, woods work skills)
- Identify how those assets may be activated to strengthen adaptability and resilience in the face of predicted fire (i.e., local woods processing)
- Identify what is needed to build those assets (i.e., strategic investments, workforce development, policy levers)
- Develop an inclusive process to identify and support diverse projects to prepare for predicted fire impacts (i.e., rubrics for determining projects to fund)

Addressing Rural EJ: from Vulnerability to Adaptive Capacity

- Projects are developed and implemented in diverse (age, gender, income level, ethnicity) and equitable **partnerships** with modes of conflict resolution
- There is a commitment to **long-term** investment in, iterative implementation and monitoring of multi-benefit projects
- There is an emphasis on and commitment to local **workforce development**
- Tribal partners and their **TEK** are recognized and centered in planning and implementation, TEK is protected by data sovereignty agreements, projects reckon with injustice in land tenure, there is an investment in Native leadership

Identifying projects that support rural EJ



**One person, one project, one community
at a time: building adaptive capacity to
address fire risk (rural EJ)**