COMMUNITY RESILIENCE AND WEALTH:

The Challenges and Opportunities for Rural Communities in a Rapidly Changing World

U.S. Endowment
for Forestry and Communities

COMMUNITY RESILIENCE AND WEALTH:

The Challenges and Opportunities for Rural Communities in a Rapidly Changing World

A Report to the U.S. Endowment for Forestry and Communities, Inc.

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EXECUTIVE SUMMARY

This report explores the "state-of-the-issue" of community resilience of rural, often forest-based communities in the United States. It draws on the evolving research literature and the experience and interpretations of resilience by practitioners of rural community economic development across the United States.

Living and Thriving in a Multi-Stressor World

Rural communities in the U.S. experience a variety of stresses. They have been and continue to be stressed by successive waves of economic restructuring, demographic shifts, socio-cultural and political transformations, short-term environmental disasters and long-term changes. The Endowment wants to understand how rural communities weather these shocks and changes, and what makes some communities able to come through strengthened and renewed, while others struggle and even collapse. What is this resilience and where does it come from?

This report suggests that communities can be characterized by where they fall along a rough continuum of resilience. Although resilience is a quality that reveals itself over time and space in different ways in response to specific stressors, certain conditions seem to influence community capacity for resilient responses to stressors. Communities that are the most isolated physically, politically, economically, and/or psychologically from the wider world are often perceived (and sometimes perceive themselves) as most vulnerable to these changes and stressors and least able to sustain themselves or reorganize themselves after crises impact them. Sometimes, such communities survive in isolation while the external environment is not conducive to survival or vibrancy. They are enduring, but not resilient. Isolated communities tend to deeply distrust outsiders and external ideas; they stagnate socially and economically; they experience out-migration and loss of effective leadership; and they are often characterized by rejection of innovative practices and enterprises. They tend to have the most difficult time finding something new to do and productive ways to participate in the larger economy as the basis for economic activity continues to shift. They often assume the factors controlling their fate are all beyond community control and they fail to focus on the contingencies they can control. These communities lack resilience.

Defining Community Resilience

Other communities feature the opposite characteristics – they and their leaders maintain connection through networks and institutions to the outside world, shape new visions for themselves, and (re)build the necessary internal capacity to lead, innovate, do business, and renew themselves to move toward that vision; they retain an openness to new ideas and ways of doing things; and they place significant resources into rebuilding and maintaining internal vibrancy while reshaping themselves to thrive in a changed context.

While there is no single widely accepted definition in the research literature or in practice, our review and interviews suggest three critical elements which, when combined, seem to encompass the meaning community resilience has in practice and in science. These elements were also present in the resilient rural communities about which we learned through the interviews. **Resilience rests on the combined abilities to deal with and bounce back from disturbances and shocks, the ability to adapt to change, and the ability to be proactive, forward-looking and self-determining, rather than just reactive and outside-determined, to create a desirable future.**

Community wealth – the sum total of the intellectual, individual, social, built, natural, and financial assets of a community – is at once a foundation for and a consequence of community resilience. Thus, community wealth and community resilience are inter-related but not interchangeable. Access to and control over community wealth does not guarantee the capacity for resilient response to stressors, but without it, resilience is diminished. In turn, resilient responses to stresses are those that protect, re-establish, and grow community wealth over time. By contrast, non-resilient responses deplete wealth without replenishing it.

Fostering Community Resilience in the Face of Stressors

In addition to community wealth, some of the key elements that shape communities' capacities for resilient response to stressors include functional local institutions, supportive community-focused policies, attitudes of openness among community leaders, and active institutional and informal networks that help communities have access to, exchange, and use new and relevant information. Local institutions and external policies significantly shape community capacity for resilient response. By structuring the distribution of risks resulting from the stressors, constituting and organizing incentive structures for households and community-level adaptive responses, mediating external interventions, and helping communities self-organize to create and realize visions for a better future, local institutions create capacity for resilience. Communities that lack local institutions operating on behalf of the entire community are at a significant disadvantage. Policies that promote self-determination, independence, and local authority (empowerment) have also been shown to correlate with more positive outcomes than those that are highly centralized and prescriptive or promote economic dependence. Likewise, communities that lack open and inclusive leaders with strong

internal and external networks have a more difficult time understanding and responding productively to stressors.

Fostering community resilience can begin at any time. While crisis times are not the best times to begin building skills and community capacities, they open up a window of opportunity to implement a shift in thinking and approach. Thus attention to such "teachable moments" is always important. In non-crisis times, however, it is critical to identify and nurture leaders, build leadership skills, build and maintain networks of leaders, and make effective use of outside resources to build up the different assets of community wealth and thereby foster community resilience.

Tools for Assessing and Building Community Resilience

Through the interviews and our own review, we have identified numerous tools, categorized here in four categories which, if applied by experienced practitioners in line with community goals and contexts, can yield important insights and help develop skills that contribute to community resilience. These categories of tools include: 1) assessment tools; 2) tools for (re)imagining the future; 3) tools for dialogue and learning; and 4) technical assistance resources. These tools have not been prioritized because their use and usefulness depends entirely on the context and the skills with which they are being applied. Our interviewees have found all of them useful at one point or another yet reject them as universally applicable means to build community resilience.

The appendices to this report include a catalog of recommended tools, selected resilience research, projects, networks, centers, government programs, and foundation activities, a review of the historical evolution and meaning of the concept of resilience, and a list of interviewees.

1. INTRODUCTION

Purpose and Scope of this Report

This report explores the "state-of-the-issue" of community resilience as it is evolving in the literature and as it is experienced and interpreted by practitioners of rural community economic development in the United States. Rather than confine our inquiries to forest-based communities, our empirical investigation and literature review has led us to broaden the application of the concept of community resilience to rural communities in general. We recognize that forest-based communities, which are in various stages of dependence on the timber industry and other aspects of forest value streams, face many of the same stressors as their less forest-reliant counterparts. This paper seeks to identify the structural factors, attitudes, resources, and capacities that contribute to resilience in rural communities in the face of a variety of stressors, and to identify approaches and tools that can be helpful in strengthening community capacity for resilient responses to these stressors. Through this combined exploration, we hope to present a broad-based understanding of what community resilience means and to offer insights into how it can be recognized and fostered at the community level and beyond.

Forest-Based Communities in a Multi-Stressor World

Resilience is a quality that reveals itself over time and space in different ways in response to specific stressors. It is not a mono-dimensional aspect or process and it does not occur in a vacuum. We will explore below, both through a review of the pertinent literature and drawing on interviews with practitioners, what resilience is and is not in greater detail. Suffice it to say that resilience to one stressor may not necessarily, but can, assist in being resilient to another. Forest-based communities face a wide variety of stressors, ranging from environmental and climatic, to economic, demographic, and social stressors. No matter the specific stressors and the contexts in which they occur, it is helpful to recognize that historic, current, and future stressors affecting forest-based communities have and will arise as a result of economic restructuring and/or environmental changes and impacts.

Rural community development experts suggest that communities have historically been and continue to be stressed by successive waves of economic restructuring. For example, the transition from manufacturing to services, exacerbated by abandonment of domestic manufacturing by state and federal governments and globalization of production and trade in forest products, has hit forest-based communities with breathtaking though often slow-moving force. The macro-economic emphasis on growth at all costs has driven consolidation not only in forest products but in banking, retail, energy and other sectors to the detriment of small communities. Centralization and consolidation have led to loss of financial capital availability, loss of product markets, lack of local control over pricing of goods and services, lack of competitive skills and lack of access to technologies, such as broadband internet connectivity, required to link to emerging markets. Economic restructuring has produced joblessness which has led to increased engagement in the drug-related economy and other instances of criminal activity. Joblessness and changing demographics have also increased rural community dependence on transfer payments and public sector employment.

Economic restructuring has also stressed the natural resource base. Industrial demands have resulted in large-scale extraction and degradation of natural resources, including water, soil, air, forests, other open space, and species loss. Many forest-based communities have experienced wild fires, floods, droughts, and pest and disease infestations. These "natural disasters" are often linked to changes in the resource base brought about in response to economic restructuring. Consolidation and growth of industry has led to the loss of decision-making control over natural, financial, and built resources due to increasing outside ownership.

Rural communities used to have to reinvent their competitive advantage every 50 years or so. Now it's every 10-15 years. Most rural communities I've worked in don't have the institutions set up to do that.

There are many types of forest-dependent communities. The Endowment has identified forest-amenity communities with land values determined by amenity rather than production values, healthy forest-reliant communities with economically viable working forests, and vulnerable forest-reliant communities with a declining forest production economy. Stressors vary for these different types of communities. Federal lands communities have been stressed by the move away from timber production and the reduction in federal revenues to local communities. Meat-packing communities have been stressed by an influx of immigrants. Communities in the South have long been stressed by racism, exclusive leadership that is not representative of the greater community, and corrupt, inequitable governance, as well as dependence on low-wage extractive industries. Land loss and lack of access to government programs among African American families combined with markets controlled by a few large players stress forested communities in the Southeast. High amenity communities are stressed by an influx of urbanites and retirees, increases in the cost of living, a lack of affordable

housing, and the high cost of social services. Appalachian rural communities are stressed by extractive industries (coal, timber) controlled by outsiders as well as lack of government support for forest-based development.

Many communities have experienced general depopulation and/or loss of working-age population and out-migration of youth. Across the country, as a result of the changing economy, fewer and fewer Americans live in small rural communities as a proportion of the total population, and the value of rural communities to the nation as a whole is not commonly appreciated. "There has been a shift of political influence to the suburbs. There is a greater need than in the past to have rural issues resonate with people who don't live there."

While it is impossible to predict the future with any certainty, experts anticipate the trend toward greater fragmentation of the landscape of some forest-based communities to continue, including the further spread of invasive species, and a variety of environmental changes related to anthropogenic climate change, such as higher temperatures, changed precipitation patterns (including more floods, droughts, water shortages and related conflicts, in some regions more powerful storms, sea-level rise along the coasts), loss of biodiversity, and other secondary impacts that are more difficult to project. Economic restructuring is expected to be driven by the aging of the population, increased demand for social and health services, changes in the housing market and the energy economy. Forest land values are expected to increase due to growth in the carbon credit market which may lead to increased land speculation. The decline in America's pre-eminence as a global power and the rise of China and other countries will have unanticipated impacts on rural communities.

Communities that are the most isolated physically, politically, and/or psychologically from the wider world are often perceived as most vulnerable to stressors and least able to sustain or reorganize themselves after crises impact them. Sometimes, isolation has allowed communities to survive when the external environment was not conducive to survival. They have learned deep distrust of outsiders. These communities have the most difficult time finding something new to do and productive ways to participate in the larger economy as the basis for economic activity continues to shift. They often assume the factors controlling their fate are all beyond community control and they fail to focus on the contingencies they can control. ("We can't move our town closer to an interstate, but we can keep Main Street from deteriorating.") Unfortunately, experts suggest this describes the prevailing world view in the majority of rural communities. "Communities are not dealing with these challenges very well." "Apathy is a major factor. Nobody is going to step up to the plate and take a risk." "They are incapable of responding to a lot of them (stressors), if not most of them. They become victims of most of them." "They respond with fear and holding on as closely as they can to what they have known and not being willing or able to look creatively or take chances or think about something different." "No one is willing to say what people don't want to hear." "They don't try things until they find something that works." Unfortunately, it is the minority of rural communities that appear to be exhibiting resilient behavior. The majority of rural communities have not yet begun to move very far along the resiliency continuum.

In the context of ever present external stressors, it is the internal processes, attitudes, resources, and structures of communities combined with available outside support that determine how resilient forest-based communities are in dealing with the challenges of a rapidly changing world.

Approach and Information Sources Informing this Report

This report is informed by a review of literature related to community resilience and key informant interviews with experienced rural development practitioners from all around the country.

The twenty-five experienced rural development practitioners interviewed for this report all have had, at one time or another in their careers, varying degrees of on-the-ground experience in rural (and many in forest-based) communities. The interview was designed to encourage practitioners to reflect on their experiences in actual communities and their overall impressions of behaviors that contribute to and detract from community resilience. A list of interviewees and the interview schedule approved by the Endowment is appended to this report.

The literature review involved a broad survey of relevant bodies of literature, involving work in ecology, disaster studies, engineering, psychology, and other social studies related to resilience. The goal was to provide some background information on the evolution and different disciplinary understandings of resilience, as well as to delineate common themes and characteristics of resilient communities. It is important to recognize that the ecological, engineering, and disaster literature on resilience is further developed than the social science literature on resilience, and thus the propositions offered here should be viewed not as solid fact, but as emerging themes in the literature that require ongoing research. Specifically, studies related to resilience of forest-based communities are summarized in *Understanding the Social and Economic Transitions of Forest Communities* produced by the Pacific Northwest Research Station as a Science Update in 2008. It is worth noting that relatively few studies have been conducted comparing resilient with non-resilient forest-based communities over time, except in the context of disaster preparedness. Perhaps the most intriguing exception to this is the in-depth study of community resilience through an international comparison of paired communities called *Dynamics of Rural Areas*, produced by Professor John Bryden and others in 2001. Below, we begin with a brief review of the literature on resilience (for a more detailed account, see Appendix C).

2. COMMUNITY RESILIENCE

Academic investigations of the concept of "resilience" have been conducted over the past several decades in a wide range of disciplines, including ecology and natural resource management, the disaster, risk and hazards field (itself multi-disciplinary), systems analysis, global change studies, economics, organizational behavior, engineering, physics, psychology and sociology, development, and even military studies. Clearly, many of these studies have an applied character and overlap – much like the interest of the Endowment in resilience of forest-based communities – with practice.

Below, we provide a brief synopsis of the meaning of the concept as it is currently used in various disciplines. We also report on how individuals interviewed for this report understand the concept and discuss how the academic and practitioner understandings compare to the Endowment's definition of resilience.

Overview: Evolution and Meaning of Resilience in Various Disciplines

The concept of resilience emerged in ***ecology*** as early as the 1950s (e.g., Errington 1953) and has been a central research theme and working concept there and in related fields such as ***natural resource and environmental management*** since the early 1970s (for reviews see Brand and Jax 2007; Folke 2006; Gallopín 2006; Gunderson 2009).

Simply put, ecological resilience is a characteristic of ecosystems to maintain themselves in the face of disturbance (Adger 2000). One critical implication of this definition is that resilience does not only help to maintain systems in a desirable state, but potentially also in an undesirable one – a situation commonly referred to as a "trap" (e.g., Allison and Hobbs 2004). Today, most ecologists understand resilience as the capacity of a system to absorb disturbance and reorganize while undergoing change so as to still retain essentially the same function, structure, identity, and feedbacks (Walker et al. 2004).

In ***risk, hazards, and disaster studies***, the concept of resilience has been absolutely central to the concerns of hazards management, hazard mitigation, and recovery since the inception of the field in the 1930s. Closely related notions of vulnerability, coping with extreme events, and a system's or community's capacity to recover and adapt have been central research topics for hazards experts since the early 1970s. Since the 1990s, "resilience" has been pervasive both as a topic of research and as a description of either the means or goal of a system that is able to anticipate, prepare for, respond effectively to, and recover without major losses and interruption from hazardous events (Cutter et al. 2008; Cannon 2008).

In essence, hazards researchers understand resilience as the capacity of a system (e.g., a community) to return over a short period of time after disturbance to a prior (relatively stable) state. What exactly to return to – particularly in a rapidly changing (economic or climatic or social) environment – must be considered carefully. It may be unwise to want to return to the pre-disruptive state; instead, it may be better to build into the recovery a component of adaptation to change while reviewing whether the pre-existing structures and activities adequately served the community.

In any event, resilience in the face of disaster might be reflected in people's psychological ability to cope with trauma, the social cohesion of communities, economic stability and functioning, the stability and functioning of the human-built environment, and facilitative organizational, institutional and governance aspects. In addition, the field recognizes the importance of functional ecosystems and environments and well-built infrastructure, homes, and protective structures as essential components of community resilience.

The disciplines of ***engineering, economics, sociology and psychology*** have also adopted the concept of resilience as an important research focus. Engineering became interested in designing infrastructure and technological systems which can withstand extreme conditions and disruptions (e.g., http://ciasce.asce.org/; Hollnagel, Woods, and Leveson 2006; ICE 2008); economists focused on understanding how businesses and industry can be structured and sustained throughout periods of disruption (not just from natural disasters but other economic shocks and downturns as well) and what may help them recover more rapidly afterwards. Some of this thinking has entered more recently into development studies (e.g., Rose 2004; Rose and Liao 2005; Arrow et al. 1995; Farber 1995; Briguglio et al. 2005). In psychology, the concept of resilience has entered studies of mental health and individuals', families' and communities' psychological capacities "to keep going" after traumatic events (e.g., Norris et al. 2008; Luthar, Cicchetti, and Becker 2003; Fredrickson et al. 2003; Bonnano 2004); others focus more on the set-up of organizations and institutions to be most responsive and robust during crisis times (e.g., Berkes and Turner 2006; Adger 2003a; Lebel et al. 2006; Vogel et al. 2007).

This brief review indicates how "resilience" has emerged as a pervasive and "fashionable" concept over the last decade or so. This has led to countless novel investigations in various fields, a burgeoning and hard-to-follow literature, but also considerable confusion in terminology because different fields and disciplines use the concept slightly differently. In common parlance, resilience has come to be used almost synonymously with "sustainability," or better maybe as "the new sustainability" – persistence in the face of disturbances and change. While a welcome development in some respects, the core meaning of the term is increasingly diluted or forgotten, thus potentially producing conceptual confusion rather than analytical clarity and practical strength. Extensive reviews of this

diverse field have concluded, somewhat dishearteningly, that neither resilience nor any of its underlying components have generally accepted or broadly shared meanings.

Our read of the trends in definition, use, and application of the concept over the past few decades is that resilience:

- Has *broad appeal* in a number of different fields and contexts, but is not a universally accepted or appreciated term.
- Is a *multi-dimensional* concept, involving natural/ecological, physical/built/structural, social, organizational, institutional, psychological, and economic dimensions.
- Reflects a strong recognition of *dynamic* systems being impacted by and interacting with dynamic and evolving environments.
- Parallels a *wider shift in management perspectives* from attempting to control static situations and maintain them in their familiar state, to adaptively managing and sustaining ever-changing systems.
- Can be used in a *normative, prescriptive sense* (where the quality or outcome of resilience is desirable) or in merely *descriptive sense* (where the quality or outcome of resilience can be desirable or undesirable).
- Is related, *but not the same as sustainability* (even though some use them as equivalent terms, especially when relying on the normative interpretation of resilience).
- Is variably used as a *characteristic of complex systems* leading to desirable or undesirable outcomes ("resilience allows a system to return to a prior state after a shock"), as a *means to a desirable end* ("one needs resilience in order to be adaptive, sustainable"), or as *a desirable end or outcome in itself* ("we must create resilient communities").
- Can be *studied at various scales* (individual, household, a social group, a community, ecosystem, industry, economic sector, etc.), yet always recognizes variability across space and time and requires consideration of interaction with processes and events occurring at other scales.
- Remains, despite decades of research and application, an elusive concept, whose list of ingredients is long, but for which *predictability remains shrouded*.

Relationship to the Endowment's Definition of Resilience

The Endowment has offered its own definition of resilience in forest-based or forest-reliant communities (U.S. Endowment of Forestry and Communities 2008):

"Community Resilience – The capacity of a community to adapt to changes including economic, demographic, attitudinal, land use, educational and climatic conditions. The characteristics of a resilient community include: collaborative decision-making processes, learning community, healthy ownership patterns, essential infrastructure, entrepreneurialism, capital formation and flow, significant economic activity, sufficient acres of healthy landscapes and a trained and educated workforce with transferable skills."

This definition recognizes, as do many in the wider literature:

- The multitude of environmental, social, and economic stressors that forest-based communities currently experience.
- Some ecological components of community resilience.
- Some social (workforce-related, institutional, and interpersonal) aspects of community resilience.
- Some economic components of resilience.

In essence, the Endowment appears to equate resilience with the term "adaptive capacity" as it is commonly used in the global change literature (See Appendix C for details), yet is not explicit about some of the dimensions that are essential to building adaptive capacity, such as access to technology, equitable distribution of resources, and functional governance systems. These similarities and differences are important to recognize, as additional dimensions offer more leverage points for intervention to foster and restore community resilience.

The Endowment focuses exclusively on positive traits and capacities of communities, and in that sense views resilience not as a neutral characteristic of systems (much like in ecology), but as a beneficial capacity to have. It also differs from the disaster and hazards, engineering, or psychological communities, where the emphasis is on "returning back to normal."

If the Endowment wishes to bring its own definition of resilience in harmony with the various academic understandings of the concept, and with the way community practitioners understand the concept (see the next section), the following aspects should be better reflected:

- Resilience involves the ability to bounce back from shocks, disasters, and crises; it involves the ability to learn and adapt to changes over time; and it involves a community's ability to organize itself to work towards and create a more desirable future.
- In addition to various human capacities and skills, adaptive capacity requires access to a variety of assets (some of which may be available within the community, and others outside of it), including economic resources, functional ecosystems, technology, equitable distribution of resources, and functional governance systems.
- The maintenance of ecological integrity and infrastructure also emerge as important aspects of community resilience.

We therefore propose the following definition:
Community resilience is the capacity of a community to

bounce back from economic shocks, crises or natural and human-induced disasters; the ability to learn and adapt to socioeconomic and environmental changes over time; as well as the ability to organize itself to work towards and create a more desirable future. The characteristics of a resilient community include: good governance; positive, open, forward-looking attitude; a strong and diverse economic foundation; well-maintained, essential infrastructure and physical appearance; an ecologically healthy environment; and strong social and human capitals.

Below we briefly summarize the understanding of resilience held by our interviewees. We believe there is overlap between the research literature, the Endowment's current understanding of resilience, and these practitioner views. These different understandings point to the need for education as well as remarkable insights from which the Endowment and other researchers can learn.

Resilience as Understood by Interviewees

Most individuals interviewed for this report were familiar to some extent with the notion of resilience – some mentioned familiarity with the ecological or the psychological literature. About 20% stated that they do not use the term much, in part because communities don't resonate with the term, or because it may create unnecessary labels. All, however, offered "off-the-cuff" definitions.

Some of the definitions offered were quite similar to the Endowment's definition (essentially, reflecting ***the capacity to adapt***), "enhancing our adaptive capacity/adaptability to change" or "Being adaptive, being able to hold onto the aspects of the past that are the strengths of the community and being able to see ahead and adapt to challenges and not lose a sense of [the] community while doing that." One emphasized the social justice aspect in that adaptive capacity, defining resilience as "The ability to deal with change and to minimize negative impacts of that change on the most vulnerable people in your community." Another pointed to long-term persistence, even in the face of undesirable change: "The ability to respond to changing economic and social conditions, to respond productively. A resilient rural community would be a community that when Wal Mart comes into the region may take a hit but does not go down the tubes because they have a Main Street and they have enough else going on that they are able to continue to do what they have been doing and try out some new strategies."

Other interviewees made explicit reference to ***the ability to resist, handle, and bounce back from punctuated disruption, a crisis, or a natural or other type of disaster***. For example, one stated, "It's the ability of communities to spring back, to reinvent themselves, to survive in the face of adversity. To build on their own assets." Another interviewee put it this way: "There are outside impacts that happen but the system is able to maintain some internal equilibrium whatever economic, or climate, or sociological disruptions there are. In a community, it's going to relate to people [being able economically] to meet their needs when the hard times hit." Some interviewees were more explicit about the assets that would enable this ability to bounce back: "A community that has a combination of the human and the financial assets in place that allow them to deal with the curve balls that life and the economy send their way; having access to the financial assets and access to the human assets who are prepared and willing to act within a social system that allows them to act effectively; having a community leadership structure that facilitates the community to quickly move to consensus and take action on issues as they arise," and "the ability to rectify existing vulnerabilities." Or: "The ability to rebound. To be able to pick yourself up. That implies not only some resource capacity but also a civic capacity." And finally, "I am somewhat familiar with the research and literature on family resilience. In a community context that would mean the community has the capacity to face difficult challenges and if not overcome them, mitigate their effects sufficiently to maintain some vitality and sustainability."

Yet others emphasized ***the ability to be forward-looking, to plan, anticipate and self-direct***. For example, one described resilience as "the ability of a community to take charge of their own future development. Having the power as well as the capacity to be in the drivers' seat to dictate how they change and how they respond to broader ecological, economic, social forces." Another stated, "Having the resources to address challenges and be planful [sic] about the future. I would say resources, relationships and skills really. Our whole community leadership development program is designed to help people have the skills they need to mobilize collective action for positive change... people having relationships, skills, and tools to solve their own problems." "It means being able to have enough variety in your skills and resources to be able to weather the dynamics of life and being able to take care of yourself. You can't have resilience unless you can create [community] wealth ... [the] ability to work together, to be innovative, to attract new resources... don't just cope with it, ameliorate poverty." One emphasized life quality in this context: "Can a community provide enough economic relevance to sustain a population base? Achieve enough economic diversification so it's not on that boom and bust cycle all the time, not being hitched to just one industry. Is the community able to meet some of the preferences of the people that live there – education, social life, health care?"

Several interviewees were also explicit about aspects that can undermine community resilience, including:

- Infighting.
- Resistance to being proactive.
- Little entrepreneurial spirit.
- Political manipulation.
- Inflexible leadership structure.

- No financial assets.
- Decaying infrastructure, building stock.
- Excessive individualism and protection of one's own without thinking in terms of the larger community.
- Loss of key human services (education, medical care).
- Too much boom and bust funding (lots of funding, then foundations leaving, government funds drying up).
- "Good-old-boy" networks.
- Viewing other communities as competitors rather than potential allies.
- Being so stuck in old or personal belief systems that it undermines the ability to hear alternative or new ideas.
- Only looking for easy solutions.
- Retrenchment.
- Denial.
- Authoritarianism.
- Scape-goating people and blaming others/other forces.

The relatively limited attention paid to ecological assets and natural capital as well as to the built environment may be a function of the interviewee population, which is steeped in economic development issues. At the same time, the awareness of the social dynamics, the human and social capital aspects is virtually pervasive. Clearly, the practical reality of building resilience – be it in a developed country like the US or in rural development contexts in developing nations (as discussed above) – reveals the utmost importance of individuals and the relationships and skills among them. As one interviewee so aptly put it, "One of my colleagues from the environmental community was saying, 'People are the problem.' I said human impacts are part of the problem, but people are the solution. If we don't believe that, we might as well take a short walk off a long cliff. We need to figure out how to make do with what we've got."

In short, there appears to be a remarkable diversity in understandings of the meaning of resilience among practitioners, even if the offered definitions fall into some common categories. The definitions of resilience as the ability to bounce back from crisis and the ability to adapt are consistent with much of the scientific literature. The interpretation of resilience as the ability to create a desirable future – clearly an expansion of the Endowment's and the research literature's understandings of resilience – is one that we find compelling and worth considering further.

Summary: Components of Community Resilience

Drawing on the insights from the research literature and the practical "ground-truthing" by practitioners, we suggest that community resilience should be understood as a combination of the ability to deal with and bounce back from disturbances and shocks, the ability to adapt to change, and the ability to be proactive and forward-looking, rather than just reactive and outside-determined. This capacity for self-determination does not equate to

The capacity of a community to deal with a crisis may go beyond local resources. Thus, communities may require outside assistance to foster development and changes in beyond-local rules and regulations to foster local abilities to self-govern and develop.

isolation or independence from outside disturbance or assistance. Rather, it simply acknowledges the cross-space, cross-time, and cross-scale interaction and interdependence among individuals, institutions, sectors, and communities that makes them at once vulnerable to external forces and opens access to outside assistance.

Many authors recognize that ecological, social, and economic resilience are interrelated, though they vary in how strongly coupled they view them (e.g., Glavovic 2005). Adger (2000), for example, claims that ecological resilience of the ecosystems on which humans depend is a necessary, but insufficient, condition for social resilience.

A number of the interviewed practitioners recognized that these different dimensions are mutually reinforcing and dependent, and it is likely that communities who do not pay attention to any one of these dimensions will create vulnerabilities and liabilities that can undermine their ability to deal with stress and change.

Some of the attitudinal aspects of resilience, which are not easily fostered through outside intervention, point to the characteristics of leaders that may take a community to a more resilient place. As Flynn (2008) observed, "Resilience rests on a foundation of confidence and optimism. It involves taking stock of what is truly precious and ensuring its durability in a way that would allow Americans to remain true to their ideals no matter what tempest the future may bring."

Importantly, as many of the interviewees recognize, a community's own capacity to deal with disruptions and change may frequently not suffice to cope and adapt, but

Resilience is a combination of the ability to deal with and bounce back from disturbances and shocks, the ability to adapt to change, and the ability to be proactive and forward-looking, rather than just reactive and outside-determined.

instead is often "underwritten by resources external to the affected area" (Cutter et al. 2008). Thus, a resilient community cannot be recognized by looking at local resources and efforts alone, but also by a community's connection and access to resources beyond. This is important as the capacity to deal with a crisis may go beyond local resources; communities may require outside assistance to foster

development, and beyond-local rules and regulations may either foster or undermine local abilities to self-govern and develop. For example, to support local planning efforts that increase community resilience, barriers stemming from state and federal laws or policies must be overcome (e.g., states and federal governments tend to have an interest in supporting local development, no matter whether this development may be in hazardous areas; historically, federal policies have emphasized risk-reduction and risk-sharing strategies over risk-avoidance, and there has been a crisis of commitment among governments at all levels (Berke and Campanella 2006)).

We will return in later sections of this report to concrete actions that can be taken to foster these characteristics, i.e., to build and increase community resilience.

3. THE RELATIONSHIP BETWEEN COMMUNITY RESILIENCE AND WEALTH

Community wealth is at once a foundation for and a consequence of community resilience, but the two are not synonymous. Below we offer a definition of inclusive community wealth, discuss the relationship of community wealth to adaptive capacity as defined in the resilience literature, and report on practitioners' and researchers' understandings of the relationship between community resilience and wealth.

Community Wealth and Adaptive Capacity

One way to define community wealth is in terms of six categories of assets: intellectual, individual, social, built, natural, and financial. When defined this way, it becomes clear that stocks of community wealth are essential to building what the research community defines as "adaptive capacity."

Intellectual capital is the stock of knowledge, innovation, and creativity or imagination in a region. Imagination is what allows us to create new knowledge and discover new ways of relating. Investment in intellectual capital is through research and development and support for activities that engage the imagination, as well as diffusion of new knowledge and applications. Earnings from intellectual capital include inventions, new discoveries, new knowledge, and new ways of seeing.

Social capital is the stock of trust, relationships, and networks that support civil society. Investments in bridging social capital are those that lead to unprecedented conversations, shared experiences, and connections between otherwise unconnected individuals and groups. Investments in bonding social capital are those that strengthen relationships within groups. For example, sponsoring a town-wide festival could be seen as an investment in bonding social capital for town residents. Earnings from investment in social capital include improved health outcomes, educational outcomes, and reduced transaction costs, among others.

Individual capital is the stock of skills and physical and mental healthiness of people in a region. Investments in human capital include spending on skill development (e.g. literacy, numeracy, computer literacy, technical skills, etc.) and health maintenance and improvement. Earnings from investments in human capital include psychic and physical energy for productive engagement and capacity to use and apply existing knowledge and internalize new knowledge to increase productivity.

Intellectual, individual, and social capitals as defined above are foundational to what many of the researchers cited call **"social resilience."** Skills, trustful relationships, and knowledge are all important for creating the kinds of community interactions, communication channels, and new initiatives that increase community resilience. They also increase the community's response capacity (but do not necessarily directly or immediately result in lower exposure or sensitivity to stressors); hence social resilience is essential to reduce vulnerability but insufficient by itself. Adaptive capacity requires many of the same components namely: trust, networks, institutions, education, training, information and skills.

Natural capital is the stock of unimpaired environmental assets (e.g. air, water, land, flora, fauna, etc.) in a region. Natural capital is defined by Fikret Berkes and Carl Folke as having three major components: 1) non-renewable resources such as oil and minerals that are extracted from ecosystems, 2) renewable resources such as fish, wood, and drinking water that are produced and maintained by the processes and functions of ecosystems, and 3) environmental services such as maintenance of the quality of the atmosphere, climate, operation of the hydrological cycle including flood control and drinking water supply, waste assimilation, recycling of nutrients, generation of soils, pollination of crops, and the maintenance of a vast genetic library. Investments in natural capital include restoration and maintenance (Berkes and Folke 1991). Earnings or income includes a sustainable supply of raw materials and environmental services. Natural capital and its systems are essential for life. People can destroy, degrade, impair and/or restore natural capital but cannot create it. Maintenance of natural capital is necessary to achieve **"ecological resilience"** as defined in Section 2. Equitable access to resources, including but not limited to natural capital, is part of adaptive capacity.

Built capital is the stock of fully functioning constructed infrastructure. Built capital includes buildings, sewage treatment plants, manufacturing and processing plants, energy, transportation, communications

Resilient responses to stressors are those that protect and grow wealth over time. Non-resilient responses deplete wealth without replenishing it.

infrastructure, technology and other built assets. Investment in physical capital is in construction, renovation, and maintenance. Physical capital depreciates with use and requires ongoing investment to maintain its value. The income or earnings generated by physical capital exist only in relation to its use. For example, sewage and water treatment plants contribute to human capital (health). Schools contribute to human capital (skill development) and social capital (if they are used as community gathering places) and may contribute to natural capital (if they include natural areas that are maintained or protected by the school).

Financial capital is the stock of unencumbered monetary assets invested in other forms of capital or financial instruments. Financial capital, if well-managed, generates monetary returns that can be used for further investment or consumption. For example, financial capital can be invested in land protection through outright purchase or purchase of easements. Public financial capital can be accumulated in a variety of ways including building budget surpluses by collecting more in tax revenues than is spent on services, borrowing through bonding, and charging fees for public services over and above the real cost of services. "Rainy day funds" are an example of public stewardship of financial capital, designed to help society weather risks and uncertainties. In addition, through the growth of the non-profit sector, private philanthropic capital is often tapped for investment in other forms of capital that yield public goods, for example, preventive health care programs to increase individual capital. Stewardship of financial capital implies responsible investment to generate added income as well as elimination of unnecessary cost or waste in providing public goods and services.

Built and financial capital come closest to what the literature recognizes as essential to have in order to attain "economic resilience," which could be defined as the ability to recover from adverse economic conditions or economic shocks. Technology, infrastructure, and economic resources are components of adaptive capacity.

Concepts of Community Wealth in Practice

In practice, community wealth means different things to different practitioners. Some think of it in terms of different "capitals" or assets which include various combinations of natural resources, businesses, people (human and social capital), finances, intellectual wealth, and infrastructure. Others emphasize local ownership or control as key to community wealth. Trust, faith and hope are part of some definitions as well. You know there is community wealth when "You have the social relationships in your community to problem solve, create a safety net, and promote and implement solutions. You can actually create some kind of product or service. You have the wealth and also the access to wealth."[1] "You have a community leadership structure that facilitates the community to move quickly to consensus and take action as issues arise – the structure must offer inclusivity and access. People need to feel like they own the place." "Can the community come together and work together? Does it have the intellectual wealth to make an intellectual investment in itself and the world? Do people invest in understanding issues? Wealth means you have the extra that you can invest in experiment, R&D and are able to take risks and stay dynamic."

Many practitioners think that social relations or social capital may be the most important type of community wealth when it comes to achieving resilience. "It's the ability of local people to solve problems. The ability to identify what you have and leverage it for the benefit of all." "You can't have resilience unless you can create wealth in terms of the ability to work together, be innovative, attract new resources." "We know how to help each other. There's this caring and sharing in the South." Social science assessments of the resilience of forest-based communities support this observation. "FEMAT (Forest Ecosystem Management Team Assessment) found the importance of leadership, networks, civic participation, norms, and trust, even in communities with few economic opportunities. In SNEP (Sierra Nevada Ecosystem Project), social capital was said to account for the finding that not all communities with high socio-economic status had high capacity" (Donoghue and Sturtevant 2007).

"The ability of a community to adapt to change and take advantage of opportunities depends not just on a community's stock of assets, but also on whether or not it can activate these assets to solve a problem or achieve desired outcomes." (Donoghue and Sturtevant 2007)

Another perspective identifies wealth as an asset that can produce income. " In the Southeast, we like to think about land as wealth and capital for our communities, but in most cases that's not true because capital is something that can generate income or something positive. Most of the time what we see is land becoming a liability. People don't use it, they owe back taxes, they lose it. It's not capital anymore."

Another distinction is that community ownership is not the same thing as community wealth. Communities can own assets that only benefit some of their members and not the whole. For example, a community may own parkland that serves one segment of the community but not the others. Community wealth implies assets that benefit the whole.

Community wealth is a necessary but insufficient condition for achieving resilience. "If you ain't got any reserves, you're not going to fare well when you get stressed.

[1] In this and following sections, we quote liberally from the interviews. These statements are in direct quotes. Quotes from other sources are referenced separately.

Two systems can look the same from the outside, but if one is almost at a breaking point and one has good reserves embodied in the system, how they behave under stress will be different." "The more assets you have, the easier it is to determine your future and not be determined by it." However, reserves come and go and maintaining reserves requires continual investment.

"Can you have resilience without some forms of wealth? Probably not." By inference, can you have some forms of wealth without resilience? Definitely. Therefore, while capturing one or more value streams from forests for the benefit of communities may contribute to stocks of community wealth, those stocks by themselves are insufficient to insure resilience over time in the face of stressors. "The ability of a community to adapt to change and take advantage of opportunities depends not just on a community's stock of assets, but also on whether or not it can activate these assets to solve a problem or achieve desired outcomes" (Donoghue and Sturtevant 2007).

Resilience implies the capacity to mobilize and often re-orient and re-organize existing wealth to overcome stressors brought on by either economic restructuring or "natural" disasters. Community wealth refers to both the stocks of assets a community controls, for example the dollars in a community endowment, and the flow of investment into the stock and depreciation out of it. Resilient responses to stressors are those that protect and grow wealth over time. Non-resilient responses deplete wealth without replenishing it. "You need economic relevance working with your assets to build more assets to meet community preferences and become more resilient." In studying the dynamics of rural areas in the European Union, John Bryden concludes, "it is not so much the tangible resources themselves that matter for economic performance, but the way the local people are able to exploit those available to them and sometimes to ensure a favourable flow of transfers in their direction" (Bryden and Hart 2001).

4. THE ROLE OF INSTITUTIONS AND POLICIES IN DETERMINING THE CAPACITY FOR RESILIENT RESPONSES TO STRESSORS

Researchers and practitioners agree that local institutions and higher-level (i.e., non-local) policies play a crucial role in determining community resilience. Here we describe the various roles of local institutions and higher level policies in relation to community capacity for resilient response to stressors.

Local Institutions and Community Resilience

Any community's capacity to respond positively to stressors is shaped by the presence or absence of local institutions. Forest-based communities are no exception. Functional local institutions support resilience by:

- Setting and clarifying the "rules of engagement."
- Providing incentives for beneficial, and disincentives for detrimental, individual and collective behavior.
- Providing a focal point and opportunity for community visioning, engagement, and crisis management.
- Serving as critical institutional memory.
- Structuring the distribution of risks associated with certain stressors.
- Constituting and organizing incentive structures for households and community level adaptive responses.
- Mediating external interventions.
- Offering clear guidance of what to do in a crisis.
- Facilitating the exchange of resources and reciprocity among community members.
- Sustaining momentum toward achieving community goals.
- Serving as a contact point for external institutions (e.g., other levels of government, academic institutions).

"Institutions are the 'rules of the game' structuring and governing individual and collective behavior. The rules determine who may play (i.e. who is allowed access or voice) and how the game should be played (i.e., the interactions between actors). They are both formal (including legal systems, constitutions, or property rights) and informal (such as customary rules, patronage networks, caste systems, and social norms). They provide the incentives and disincentives for individual and collective behaviors. Institutional development is about 'institutionalizing' (developing, adopting, codifying) certain forms of behavior that are considered acceptable; to construct institutional limits within which personal ambition and interest will be circumscribed and directed" (Hobley and Joshi 2008). In some communities, local institutions exist and provide genuine opportunities for engagement; in others either they do not exist, or they are essentially exclusionary and restricted to power elites. "There has to be some infrastructure. In our area, beyond the church there may not be any trustable organized capacity."

In a study of the relationship of local Institutions to community resilience internationally, Agrawal and Perrin discovered that local institutions contribute to resilience by structuring the distribution of risks from stressors, constituting and organizing incentive structures for households and community level adaptive responses, and mediating external interventions. Mobility or the ability to move people and resources around addresses risks across space. Storage or savings or reserves addresses risk across time. Diversification of wealth addresses risks to asset classes. Communal pooling or shared resources or aggregation of resources for the common good addresses risks to individual households. Developed avenues of exchange of resources and reciprocity can substitute for other forms of risk mitigation (Agrawal and Perrin 2008).

Community capacity in our area is just very low. There are very few community organizations and support organizations. We have networks of development, but they aren't focused on sustainable practice.

In addition to the functions identified by Agrawal and Perrin, community-based institutions can provide essential "institutional memory" that may foster the capacity for resilient response. "In social systems, the existence of institutions and networks that learn and store knowledge and experience, create flexibility in problem solving and balance power among interest groups play an important role in adaptive capacity" (Folke et al. 2002). However, institutional memory often serves as a barrier to resilient response when history is misunderstood or when it is assumed that because a given response did not work the last time it was tried, it will not work this time either, even though circumstances may have changed significantly.

Experts interviewed for this research cited the importance of local institutions in making communities better able to cope with stressors and still make progress toward their goals. Specifically, the existence of a staffed local non-profit organization supported by a combination of local and external support with the interests of the whole community at heart can make a real difference in a community's capacity to weather stressors. "When the floods came all of a sudden this (non-profit) office that focused on water quality improvement was temporary housing and a food distribution center and communications center. They didn't go to fancier people in the community because they knew us and they didn't know them. Institutions that are for and of the community and that reflect multi-generational folks that are respected on boards and as members are critical to enabling resilient responses."

Institutional memory can serve as a barrier to resilient response if history is misunderstood or if people assume that because a given response did not work in the past when it was tried, it will not work this time either, even though circumstances may have changed significantly.

"There is a ton of money already in rural places that's draining through the natural transfer of intergenerational wealth and the purchase of resources by corporations. We need to offer different alternatives for local investment. People should be asked to aggregate their wealth differently. We need to build institutions for aggregating and reinvesting in new ways. If you don't do this, you reinforce the social structure that says these same people are going to be in control."

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"Having the nonprofit infrastructure, no matter what kind it is, community-based, faith-based, whatever, being engaged as a venue for the community to make things happen is critical." "In recent years there has been a fascination with collaboration and collaboratives as a building block for rural development. But collaboratives are not local institutions." "If you have a local institution staffing a collaborative you get the combination of a strong local institution that can staff and implement and a way to keep the collaborative going. With the very positive movement of the environmental movement to become involved in collaborative groups they see collaboration as a tool to reach their environmental goals. They don't see building community capacity as a goal."

There are real differences between places with functional local and supporting institutions and those without. "If you look in North Carolina, the early CDC movement was extremely important. The idea of organizing communities around economics and building local capacity that could receive and manage external capital was huge. It hasn't happened in the other Deep South states, except maybe Arkansas, but not like North Carolina."

Affiliation with an academic institution like a community college dedicated to serving the community can also make a real difference in small communities. Unfortunately, all too often, it is the community that serves the college and not the other way around.

Local institutions are only part of the institutional puzzle confronting communities. Institutions of government at many levels impact local response capacity. Simply scoping out the jurisdictions and overlap of various government units is often a highly time consuming and complex endeavor. Figuring out how to work across various jurisdictions, time, space, strategic focuses and aspects of knowledge of both facts and process is even harder. Yet, working across levels and across scales is essential to integration into a transforming economy. "The community has always organized around issues. Now they are finding they must organize around governance and that's different. How do you negotiate with the various levels of government? How do you figure out who has a program that may support what you need to do? How do you find the support you need to take risks?"

Higher-Level Policies and Community Resilience

Any community's capacity to respond positively to stressors is affected by the degrees of freedom created by national or international policies and the widely held assumptions that underlie them. Based on our and other's research, we found that community resilience tends to be constrained by:

- Market failures.
- Past and present policy failures (e.g., transportation or information technology investment policies that neglect rural areas).
- Historic land use patterns.
- Centralized and non-local governance structures (external control of resources by corporate or government entities far from the community).
- Imposition of ideas, initiatives, and programs from outside local communities.
- Heavy dependence on external land owners and large industries.
- Exclusionary focus on economic growth and "bigger is better."
- Extractive use of resources to the detriment of the environment.
- Siloed nature of government agencies.
- Public education that does not give young people

the skills to thrive in rural areas (e.g., provide entrepreneurial skills).

By contrast, higher-level policies and interventions can also foster resilience, for example, through:

- Migration policies that support in-migration or remaining in rural areas.
- Investments in education and training.
- Support of and maintenance of critical infrastructure and social institutions (e.g., adequate health care).
- Encouragement of local self-determination, independence, and local authority.
- Investments in information and communications technologies.
- Support for smaller-scale individual and collective entrepreneurship.
- Sensitivity to local assets and conditions.
- Investments in the philanthropic sector, including incentives and state level matches.

A particularly compelling example of the impact of a change in higher level policy comes from the Gulf Coast where the locus of control over federal resources shifted from the city of New Orleans to the state of Louisiana after Katrina. "That was a huge shift of power in New Orleans. It changed how people reacted to historical stresses because people who always had controlled things didn't have it anymore." This allowed groups to organize around understanding how to influence the way resources were being distributed. "I think people have become more resilient. People are starting to look forward – taking on a never again attitude – people are more engaged than they have ever been and people have stayed engaged throughout the state. That's a huge outcome. People are really understanding how policy impacts them and how decisions get made. Now they know how to track power and how to track money."

Policies reflect the values of the powerful forces that shape them. In a unique study of rural communities in Greece, Scotland, Germany, and Sweden, John Bryden and his colleagues paired rural communities within a similar regional context that had experienced different economic outcomes. They identified a number of key factors, variables and themes that were important in determining the economic success or failure of rural areas in which policy had a significant influence. "Our research indicates that failures arise as much from historical and present-day policy failures as they do from market failures." For example, the more centralized and non-localized the governance structure and the more large external initiatives were imposed from outside, the less positive the outcomes. "At the end of the research, we cannot point to any case where centrally inspired initiatives or heavy external investment have led to the enduring success of local economies, even if these may have once seemed to come to the rescue of depressed economies." Conversely, self-determination, independence and local authority were linked with more positive outcomes. In geographically isolated areas, investments in information and communications technology open up new opportunities and change perceptions of connectedness with the outside world. Likewise, communities with a history of dependence on large landowners or large external industrialists that extract local resources tend to be less successful compared to communities with smaller-scale individual and collective entrepreneurship developed with sensitivity to local assets and conditions. Each of these factors, along with others such as migration policies and investments in education and training, were found to have real impact on community capacity for response to stressors and to influence the outcomes of adaptations to a transforming economy (Bryden and Hart 2001).

Any community's capacity to respond positively to stressors is affected by the degrees of freedom created by national or international policies.

In the United States, policies that are geared toward continuous economic growth, and "bigger is better," have disadvantaged many rural communities. Policies and institutions are as important as stocks of wealth in shaping the capacity for resilience. Policies that encourage extractive use of resources to the detriment of the environment and foster external control of resources by corporate or government entities far removed from the community make it very difficult for communities to respond to a transforming economy. However, even when communities control local land, they often have trouble integrating into the larger economy. "Even when they [forest-based communities] had land tenure, the communities couldn't make it work because it was such a global economy. Everything works against the development of a local and regional natural resource-based economy because you don't have the processing facilities, you don't have the consumers, you don't have a transportation mechanism. A lot of communities have tried to sell rural goods into urban markets but they tend to be the big box stores that have very different supply mechanisms and you can't access them because you don't have the volume they need."

In forest-dependent communities, as one interviewee put it, "trying to diversify a traditional natural resource economy is a bitch. Almost always the people that are there can't think about anything but natural resources. Sometimes people come in from outside and bring in a business that isn't natural resource related." Local policies based on historic land use patterns can also be effective obstacles to change. "One of our biggest problems was planning and zoning. We had regulations that excluded home-based businesses. It took us three years to get that thrown out. Whatever your unit of governance is, will it allow for change? Will it allow people to do things differently?"

Transportation policy has also disadvantaged rural communities. As transportation costs rise, it becomes harder and harder for small remote communities to maintain vital links to the larger economy both in terms of import and export of goods and services and for purposes of commuting to work and play. Many communities could benefit from innovative transportation options like jitney services or car sharing, but regulations for public transportation are so onerous that it is not cost effective for entrepreneurs to provide small-scale solutions. "If I live in a town of 300 people and I know there are five other people who travel to the big town in my area, I cannot legally ask them to kick in for a van to take everyone at once. I can't legally buy a van and charge my neighbors for a ride. I would have to be a licensed commercial carrier, maintain logs, apply for my routes."

Public education curricula are designed to teach young people to take a job rather than to own and run their own business. Introducing entrepreneurship education into public schools requires policy changes that could open up new opportunities to rural youth.

The siloed nature of government agencies and their programs makes it difficult for communities to access the financial and technical resources they need to identify and implement non-siloed solutions that impact the environment, the economy and social conditions simultaneously. In addition to continuing to attempt to assist communities in working through what are often highly inefficient and often inequitable state and federal systems for resource distribution, there may be (rare but precious) opportunities to reconfigure agencies and programs so they are better able to serve people living in rural communities where problems and their solutions are generally multi-dimensional.

5. FOSTERING COMMUNITY RESILIENCE AND WEALTH

There is very little in the literature on the stages of community resilience or the process communities go through in becoming more resilient over time. This research has allowed us to tentatively identify four stages in developing resilience as we have defined it. The names we have given to the four stages are subject to change and refinement. They are: resignation, wishful thinking, excessive dependence, and successive experimentation. We conceive of stages of community resilience as possibly analogous to stages of human maturation or stages of grieving. As we become better able to characterize these stages, communities may benefit by understanding where they are in the process and what they need to do to move to the next level.

In this section, we first describe different stages of community resilience as understood and experienced by practitioners. Next, we identify openness, functional local institutions, and new information as key ingredients for fostering community capacity for resilient response to stressors. Finally, we address the question: What can be done to help more communities move along the continuum to develop the capacity for resilient response? We discuss teachable moments, how to identify change agents, leadership qualities that contribute to resilience and what we know about how to foster those qualities. We discuss the role of outside resources and other factors that may help communities become more resilient over time. We describe the types of tools available to address various aspects of community resilience and offer suggestions for several new types of tools that may be needed.

Stages of Community Resilience

Vernonia, Oregon, is an isolated timber town of just over two thousand people in a valley about an hour from Portland. In 1996, it experienced a 100-year flood that destroyed the downtown. The community was used to being prosperous, but it wasn't well organized and its residents and institutions were not geared for effective response. It took years for the community to get back on its feet. During those years, the community engaged in a strategic planning process which resulted in investments in leadership training, business assistance, renovation of a cabin and other activities. In 2007, it flooded again. This time, the community pulled together immediately. They had their kids back in school within a week, got the state and neighboring communities involved, and started a "good news" newspaper. Arguably, Vernonia's capacity for a resilient response to stressors increased over time.

Cobscook Bay, Maine, has been building its capacity for resilience over at least 25 years. The first step was a small-scale response to deteriorating water quality that linked school children with other members of the community who were worried about the shellfish industry. About ten years later, a community organizing effort was able to build on increased awareness of the issue to put rules and regulations in place regarding water quality. Today, there is a whole range of institutions and engagement in sustainable community development for Cobscook Bay. "Is Cobscook Bay more resilient now than it was 20 years ago? I would have to think it would be. It has so many more connections outside of Cobscook. They have confidence they probably didn't have 20 years ago. They understand these connections they hadn't focused on 20 years ago."

Stokes County, North Carolina, is a rural place with a lot of farmers on the border with Virginia. The community reached out for help at a point when there was no one in the group that knew how to plan or run a meeting. Over time and with external assistance, the community group formed a strong partnership with a community college to train people to fill nursing positions, formed a farmers' cooperative and pursued a community kitchen, and established ties between farmers and local retailers. It has been several years since the community group has been self-supporting and functioning on its own and it is reported to be still going strong.

Vernonia, Cobscook Bay and Stokes County, as described by interviewees, are communities that have benefited over time from external assistance with capacity building, yet have been able to metabolize or internalize the external assistance they've received to develop a community-wide capacity for resilient response. Examples like these suggest that community resilience can increase over time and it is indeed possible to foster community resilience.

Researchers and practitioners in the field of rural community economic development are at a relatively early stage in trying to understand what it means to have community capacity for resilience. We do not yet have a well developed, research-based understanding of the stages of development of the capacity for resilience. Practitioners are able to name characteristics of communities they consider to be non-resilient. One word for these communities is "resigned." Some of these are the communities that give up before they get to the starting gate. Often, too many people don't believe they can change anything that matters so they don't try. "There are plenty of communities out there where people will bitch and moan about the state of affairs, but no one will step up to the plate and make sure things happen." "There is a loss of population, a lack of vision about what might be possible because they are bound in tradition and the loss of population. It's the shadow side of resilience – the attitude that 'we can get through this, we can make it.' That's a wonderful thing, but we value old ideas so much we resist new leadership." "Communities that struggle the most are not

willing to put down the old fights. Detracting from resiliency are those who stick by their belief systems so strongly that they're not willing to listen to other components." "I think of communities in the Mississippi Delta where divisions of race are so deep and the community is so busy fighting each other they are just going down the toilet."

Often, power is tightly held and there are powerful forces arrayed to prevent change and protect the status quo. Information is closely guarded by people who are acting in separate silos and actively restricting information flow between silos. These communities generally lack a full and accurate picture of reality. Leadership is a closed circle with high barriers to entry. "In rural communities in Louisiana, it's two people that own everything and run everything. It's very difficult for the average citizen to figure out where to go for help and how to get things accomplished. You have police juries as a form of government. It allows lots of fraternizing and maintaining of the status quo." In communities where litigation has become a habitual, resource draining response to disagreement, lack of trust prevents progress. People in these communities can often tell you what they don't want but not what they want. The least resilient communities are unable to respond positively to stressors.

Up one rung on the ladder are communities that focus their responses to stressors on seeking "silver bullet" solutions from the outside. "Usually the responses are, 'Let's get the big new thing here' and the thing can be anything. That's the normal response. And its effect is often counterproductive because it's externally owned, tends to put locally owned businesses out of business, and reduces the multiplier effect." The "big new thing" is generally sold to communities as a way to create jobs. This remains the dominant thinking in conventional economic development circles. "We let large multi-nationals build huge hotels that no one can afford to go to." Money is seen as another "silver bullet." Communities learn to follow the money and seek to bring in dollars from federal, state, and foundation sources to prop up existing economies. "Least effective is giving communities a big wad of money." Rather than identify what they really want and need, many communities simply make a case for what they think they can get based on externally determined funding priorities. When money isn't forthcoming, services are cut back and local taxes may increase. These communities believe the only solution is one from away. Leadership is typically tightly held with minimal turnover and inclusivity.

Some communities put an emphasis on social services as a response to stressors. They try to make sure immediate needs are met. While it is laudable and necessary to provide a safety net for the most vulnerable, this type of transactional assistance does little to create the capacity for resilient response. Often it is difficult for communities to balance the need to meet immediate needs with the need for longer term investments.

Two rungs up from resignation are communities that try to respond with internal and external resources and either don't succeed or only succeed in the short run (as long as the funds are coming in). In these communities, there seems to be a continued over-reliance on external resources over time without sufficient capacity for resilience being built throughout the community. Institutions rarely work effectively across sectors. We see this in communities with, for example, one essential institution that is heavily dependent on one or two outside funders. "The whole 'depend on us for your money' thing is very dangerous." Overdependence on a single institution like a university can foster dependency and prevent community leaders from emerging. "We've had more trouble trying to promote home grown local buy-in because people are used to the university staff being really good and writing grants and finding ways to get things done. They don't have to contribute. They don't really like the university, but it provides people to fill their rental housing and it gets them money when they need it. It's a real dependency syndrome." These communities also tend to hire outside consultants to conduct feasibility studies for initiatives that are not well grounded in a real understanding of local conditions, interests, and capacities and result in projects that rarely come to successful fruition.

Many communities in the South and elsewhere are currently struggling with generational leadership transitions. In these communities, the way is often being paved for transitions in leadership as people begin to explore alternative solutions that don't work. The progression is often from confusion about what is happening to the community and why things are changing, followed by efforts to organize led by cautious, traditional leaders. Failure to achieve results leads to discontent which often leads to the fall of existing organizations and the rise of new organizations. New organizations often try other solutions that don't work. This organizational churn helps new leaders become ready to lead. It may take 20 years to resolve a generational leadership struggle. Once new leaders are in place, a community's capacity for resilient response improves.

A turning point in community capacity for resilient response occurs when a critical mass of people in a given place "have recognized that they can't depend on people from the outside coming in to save them." That's when communities begin to ask how they can turn their problems into opportunities. This leads to communities that try and try until eventually they do succeed in embodying positive responses to stressors over some period of time. These responses seem to include a mix of internal mobilization of resources (wealth) and external assistance in which the

> *"A turning point in community capacity for resilient response occurs when a critical mass of people in a given place "have recognized that they can't depend on people from the outside coming in to save them." That's when communities begin to ask how <u>they</u> can turn <u>their</u> problems into opportunities.*

balance of control and ownership remains internal to the community and in which the capacity for resilient responses is widespread throughout the community. There is a vast difference between expecting outsiders to solve your problems, assuming you require ongoing external support to address your problems, and being able to use external assistance judiciously to augment local investment and develop internal capacity. "Communities that have resilience are the ones that become really good consumers of resources – both internal and external resources. They figure out where the grant programs are and they build relationships with those folks. They learn that if they have a strategic outlook, if they do a lot of community involvement to develop a strategic action plan, if they are open to collaboration with other communities, they are positioned for more success in competing for the few grants that are around and those patterns reverberate positively in how they deploy their own assets. They become better at recognizing the assets they have and learn how to use them. We see that over and over again." Communities capable of sustained resilient responses to stressors have diverse, redundant and networked leadership. They develop a new identity as a community.

There is a vast difference between expecting outsiders to solve your problems, assuming you require ongoing external support to address your problems, and being able to use external assistance judiciously to augment local investment and develop internal capacity.

Characteristics of the most resilient communities include:

- Accepting responsibility for one's own fate.
- Relentlessly experimenting to achieve positive results.
- Mobilizing internal and external resources in judicious balance.
- Fostering diverse, inclusive, redundant and well-networked leadership.
- Creating new community wealth over time.

The next section of this report describes what we have learned about the ingredients of community capacity for resilience and how they might be enhanced.

Ingredients of Community Capacity for Resilient Response to Stressors

Certain behaviors appear to contribute to the capacity for community resilience. Our research suggests that the following are crucial:

- Openness.
- Ability to listen.
- Tolerance of difference.
- Working across boundaries.
- Integrating youth.
- Functional local institutions.
- Use of new information.

Below, we discuss each of them in more detail.

Maybe the most frequently cited behavior critical to community resilience by our interviewees is openness. Openness is both a quality of individuals and a quality of communities. Openness is more than an attitude. Openness, a tolerance for difference and uncertainty, manifests in a willingness to listen sincerely to all segments of the community and in genuine curiosity about new ideas along with a willingness to try new things. Openness also manifests in transparent decision-making with public input, public minutes and community-wide discourse. Openness permits and encourages engagement, and fosters a sense of belonging and a sense of ownership. And openness includes embracing outside resources when they can really help. Openness seems to encourage reciprocity and giving back.

"A lot of communities have angst about have we invited the right people. There are things you can do to create an open environment. Keep minutes at the library. Don't dwell on critics. Keep the doors open. Work with who shows up and keep it open. You can't assume communities know about these things. That's the value of having a team of outsiders who are really good at process. We help the community create tactics that lead to a sense of hope and progress and change."

"What communities need are people who are willing to listen to them and not just the vocal part of the community, but really listen and understand the diverse perspectives of the community and be able to provide them the information and technology and pathways to political leaders to change."

Openness also applies to embracing the contributions of in-migrants. In some communities the in-migrants are Hispanic or Asian. They tend to build their family units by bringing more members of the family into the community over time. "It builds resilience because it brings a new culture and people willing to work in areas where others just aren't. Men come first, then families. The change in immigration rules created a whole new economic sector in the town." In other communities, in-migrants are wealthy second home owners or early retirees. "They come out of systems that work and they expect systems to work." They can bring in outside information and connect communities to outside resources.

In communities with a history of racism where the power holding back change has been primarily local, bridging behavior is an essential indicator of openness. "One of the things we're beginning to see that I'm pretty optimistic about is bridging between different racial groups to find some common ground. People are doing it by force of personality and courage." "In communities where individual people can begin to build bridges across race and begin to build trust, that's behavior that gives communities a chance to move forward. It's brave people willing to step out of their comfort

zone and build trust." "A lot of times poor black folks don't trust white people and they won't trust white people because white people won't even acknowledge what they did to black people in the past. When the white folks say, 'it wasn't us but we've benefited and we're sorry and we can understand why you feel how you feel and now let's work on ways to overcome to make up for bad decisions we've collectively made in the past and make decisions going forward that benefit all of us,' it's a reconciliation. Where there's reconciliation, people can lay down their grievances and work authentically with other groups. It's very rare, but it happens." "A new leadership is emerging that knows the civil rights struggle isn't over but there's also ways you need to bridge to win. New leaders are looking at development in a broader, different way and that's huge." In Appalachian communities, where much of the power to prevent change has been held by external entities, bridging across class can be as powerful as racial bridging in the South.

Being willing to work across jurisdictional boundaries is another form of openness. "Being able to get out of your own silo or your own unit of governance and work across and with other levels of governance and not living in the past or trying to recreate what we already lost because it will never happen, but thinking about what your opportunities are in the next century."

They have great political networks in Appalachia and they really are helping sustain gains in hard times.

Openness to change leads to organizing for change, which leads, in turn, to making and re-making local institutions. "All the communities we've worked with have tried to organize their community, tried to create some kind of a local institution aimed at facilitating change. They realized they needed institutional capacity." Reorganizing existing local institutions and/or building new institutions is another ingredient in creating the capacity for resilient response. "One of the things that almost always happens in the communities we work with is they reorganize themselves. Certain leaders leave and new ones come in. How communities have organized themselves historically had led to a fractured and dysfunctional community. We ask them how they might evolve their organizational structure to reduce the number of meetings and create more movement. It's a painful process." Community organizations may have life cycles. "They emerge in response to a stressor or a set of stressors. They reach out and get stuff going on the ground. They stop bad things from happening, rethink their collective approach, embark on some new things. Then they're confronted with the question, 'What do we do next? Do we just do more of the same? Do we scale up?' Maybe sometimes the answer is this group doesn't need to be around anymore. They may not know that without some external intervention. It's a hard conversation to have."

Integrating youth into community institutions accelerates change. "Having young people involved promotes resilience because they believe anything is possible and it promotes good behavior by adults." "Youth are better about working together across race and class lines. They are more positive." Reaching out across institutional boundaries can open up new opportunities. "In Indian Country we have examples where a couple of communities that have been dependent on the Bureau of Indian Affairs and entitlement programs have begun to see their future differently. They have started reaching out to neighboring (non-Indian) communities to pool assets to strengthen their respective positions in the region."

"We started working with a community, population 225, about 20 years ago. Main Street was boarded up, housing was dilapidated, schools were closing, etc. All the energy and time in the community went toward saving the school. Since then, they decided to consolidate the school with the next door community because the kids were begging them to. The kids thought they weren't getting an adequate education. The community energy was redirected to strategic endeavors to rebuild housing and infrastructure. This year, the community won the state's top award for community improvement for a town of any size. The population is still 225, but their hopes for the future are stronger today. It's all because a small group of community leaders decided they wanted to save their town."

Openness, functional local institutions, and new information are three key ingredients that foster the capacity for resilient response to stressors.

Reorganizing institutions can help address the need for stable funding by creating new efficiencies. "When you have five economic development groups in a town of 5,000, you have too many. We recapture investment through reorganization. We rebuild Chambers of Commerce and other connections. We reinvigorate connections. Often some of the more powerful people in the community will come back to the table because we're getting serious when we recommend reorganization."

New information helps communities discover what will work for them. "I'd go back to having an accurate picture of the conditions that exist so you can see how things are trending. The difficulty is most communities don't have the resources and the know-how to get that kind of picture because it costs money." "It's most beneficial first to have a really accurate picture of what the conditions are in the region so they can really pinpoint the opportunities and where things can be leveraged and where there is capacity to do things in the region. When people act like they did before, they don't really know." "This is where external assessment can really help. We've found communities do need help to understand where they fit in the larger economy and where they might head.

You have to help them break free of the mindset of traditional economic development." New information also includes learning about the availability of resources and how to access them. "People have responded by trying to figure out the system that they never had to play in before and how to pull in resources and recreate themselves." "Access to information is such a huge deal breaker about whether groups can work together or not. The more people who have access to the information, the better." New information is irrelevant unless there is the openness to absorb it. The less fragmented the information and the more new information reveals about the larger system in which a community is embedded, the more useful it becomes. New information can help communities differentiate between cycles and trends. If they are being affected by a boom and bust cycle then, by definition, if they hold on tight the cycle will pass. If however, they are caught in a non-cyclical downward trend, no amount of holding on tight will help. "Most communities cannot differentiate between cycles and long term trends because long term trends demand fundamental change, which is obviously harder."

These ingredients – openness, functional local institutions, and new information – have allowed a variety of productive responses to stressors including, but not limited to:

- The ***community forestry movement*** itself which works at increasing the economic, social and environmental benefits to forest-based communities of their forested environment while protecting and restoring the environment itself. At heart, this movement has been about regaining some control over local resources.
- Communities are ***redirecting local investment to support local needs***. This includes supporting local entrepreneurs, investing in modernizing or assisting existing businesses, developing local broadband, investing in local leadership training, buy local campaigns, and developing local philanthropy.
- Communities and/or businesses within them are trying to ***establish connections with urban or regional counterparts***. Many communities are seeking to capitalize on consumer demand for "local," "authentic," and "sustainably produced" products, services, and experiences. These are often very small scale efforts to bring outside dollars into the local economy, commonly described as "niche marketing." Thus far, it has been difficult for many communities and businesses to grow these initiatives to the point where they help integrate a meaningful proportion of the community into the transforming economy. The emerging new energy economy offers new opportunities to rural communities but no clear path to capture that value.
- Citizens are ***monitoring*** the environment in response to environmental stressors. There are places in the United States and Canada where citizens who share concerns about specific places have organized themselves to monitor and sometimes manage changes to their environment including controlling invasive species, restoring damaged ecosystems, protecting ecosystems through land purchases and/or easements, or organizing to remove dams. These efforts mobilize people to pay attention to their land and place and provide ongoing information for improved decision-making.
- Resources are being aggregated to ***mitigate and share risks***. "It appears that responses to stressors that are working better are when people are collectivizing. Where you have organizations that have been able to aggregate community resources and wealth then they've been able to make some positive changes. The community of Leeberville now has a community forest that they have a ten year stewardship contract for and the product goes to the local mill using local people even though BLM still owns it. This only happened because they had the organizational skills through the RC&D and that board and a history of skills and contractual understanding, and the community organizing that they did." "The people in Cascade, Idaho, collectivized around training and a community business incubator."

The examples above illustrate proactive responses to stressors that suggest an emerging community capacity for resilience.

Enhancing Community Capacity for Resilient Response to Stressors

Existing research and many anecdotal examples shared with us by our interviewees suggest numerous ways in which communities have developed their capacity for resilient response to stressors over time. We summarize here what can be done to help more communities move up the rungs of the resilience ladder.

When is the Teachable Moment for Communities with Respect to Creating the Capacity for Resilient Response?

Many interviewees suggested crises are important "windows of opportunities" within communities because people are often more ready to come together then and make changes. Research suggests, however, that crises can serve as teachable moments only if social capital, trust, institutional capacity and leadership skill to handle such moments are in

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place. Thus, such capacities must be built during non-crisis times, so that crises can be used to make changes and move the community forward.

"I think one of the really important leverage points is when something first happens and you see the immediate reaction is fear and shutting down and not being willing to change. This is a great place to bring someone in from another community that's been there." This is usually most effective after some degree of order has been restored but before all the old systems are back in place. "It's got to be something that pushes people toward being more open-minded. There are examples where somebody dramatic comes into a community and gives a speech or something happens that really turns people upside down. Like the playground your kids grew up playing on is really a toxic dump." Some crises, like floods, wildfires, or the loss of a major employer, are immediately apparent. Others like rising unemployment, loss of youth, deteriorating infrastructure or increasing ethnic diversity may be gradual with cumulative implications that take years to recognize. On the Gulf Coast, "the fear that people would lose their land really catalyzed communities. It brought people together and changed the outcome of the mayor's race and conversations around wetlands."

If a community already has a sense that something is possible and an idea of what that might be, there is an intervention point to build on. "The community has to want to change or someone in the community needs to see a problem that can be corrected." Just a little bit of funding and/or technical assistance might make the difference in a positive outcome that builds community confidence to tackle the next larger challenge.

In isolated communities, including those in the South, exposure to new experiences and to people with different life experiences can create a starting point. Interviewees report a real divide between working with people who have lived their entire life in a community and working with those who have either returned with experiences in the outside world or have moved in from away. "Whenever I would go out and have site visits in the rural communities I found the folks who had been there their whole lives were not very imaginative. They were restrained by the limits of what they had seen, which wasn't very much. They don't aspire to do more. Nevertheless, a lot of them understand they can't keep doing what they're doing. There were always a few folks that had left and gone to Detroit or Chicago and had been exposed to the world and what was possible. They were always the most optimistic and the most willing to step into the unknown." "In many communities, when we see change begin to happen is when somebody who grew up there left and came back to retire with new ideas."

Actually taking people out of their own communities to experience the reality of other places and absorb new information can awaken imaginations and create a new sense of possibility. "There are several examples of individuals that came out of initial work with Federation of Southern Cooperatives and went back to their communities and started something. Individuals leave their communities to get information, bring it back and then start something."

Even in non-crisis situations, there may be an entry point if there is a "bright light" in the community who isn't viewed as a threat, if there is a glimmer of interest in thinking about something different, or if there is a local champion. "More typically, the places that have invited us in have not experienced a horrendous trauma so much as a core of key community leaders realize they can't keep doing things the way they've always done them. They really like where they live and they want it to be a thriving place." "We find pretty universally a core group of citizens who can see what's happening and they tend to be people who travel more and have a broader perspective to judge from and are willing to pay the political price to help their community to change. It's a very small core group. We call them the champions."

You start where the community is ready. The critical piece is not where you start, it's do you move around the circle – leadership, capacity building, network building, institution building.

When it comes to helping communities respond effectively to stressors, individuals matter. "It almost always comes down to several individuals." "I can only think of it in terms of individuals." "I would say, more often than not, it's really an individual." Without at least one local champion, there is very little an outside organization can do. But, how do you find the right people to work with?

What is the Most Effective Way to Identify Change Agents or Potential Change Agents in a Community?

There are a variety of ways to identify change agents or potential change agents including:

- Spending time in a community – there is no substitute for this.
- Finding people who are willing to look at things differently.
- Avoiding preconceptions about who you are looking for.
- Looking to people who are already engaged.
- Looking to people who sit in the back of the room and crack jokes.
- Trying a hands-on project instead of meetings to bring people out and get to know them.
- Mapping out potential leaders with a group of concerned citizens.
- Building a network of leaders with diverse skills and perspectives.

Experienced practitioners suggest there is no substitute

for being willing to spend as much time as it takes in the community. “Talk to multiple sources. Ask, ‘Who do I need to talk to about this?’ This is a key step when you’re dealing with people of color or immigrant communities.” There is no predictable time frame. You don’t need to be there full time, but you do need to be there consistently over time. You are looking for people who are willing to look at things differently. “In some places folks show up quickly, in other places they don’t or you think you’ve found someone and they don’t work out.” You need to talk with as many people as possible, within the community and outside it. People will tell you who is influential in the community. These may be the names everyone knows, but there are often a few wise people in the community who are less obvious and harder to find – like the librarian or the person who has taught third grade for 40 years.

Avoid preconceptions about who you are looking for. “Maybe you meet someone who is younger or doesn’t fit the accepted profile and sometimes they can emerge and represent common ground in a new direction. I’m seeing a lot of younger people emerge in those roles in some places. Sometimes I think the external groups aren’t always willing to take the risk to invest in new leadership and sometimes I think you need to be willing to do that.” “In Ord it’s been an attorney who is passionate about his home town. In Farnum, there’s a teacher who plays that role. In another town it’s a banker.” “It’s often a newcomer to the community.” You have to create venues in which it is safe for people to self-identify as leaders or potential leaders.

“To me, it’s beyond a coincidence that a lot of people who have taken leadership roles are women. The response of a lot of the men has been to go outside their counties and states to find work. Their primary role is to bring financial stability to the households but not necessarily to keep them in communities. The women are the ones that see the impact on their kids’ schools when families have to leave and the schools suffer from low enrollment and then consolidation and long trip bussing for the kids. Women realize these concerns much more quickly than men. A lot of these women have deep multi-generational roots in the community.”

“Interestingly, it’s rare for local government to play much of a role at all in leadership – either in being leaders or in sponsoring leadership programs. If you look at communities that are responding proactively to stressors, it isn’t elected officials who are doing it. In my observation, elected officials tend to believe there’s enough on their plate already and they have a specific list of responsibilities and they should stick to that and they are afraid that if they take too many risks they will be pushed out of office or not re-elected.” However, in the rare instances where there is governmental leadership, it can make a real difference. “I’m thinking of Bonner’s Ferry near the Canadian border who has a very progressive mayor who brought the county, the city, and the tribe together around a particular land management issue.”

Try unusual approaches to getting people out. For example, instead of a meeting, try a project. It will bring people out who wouldn’t necessarily show up at a meeting.

If the community is already organizing around an issue, find the people that are already engaged. See if they are amenable to expanding their engagement beyond a single issue. The issue doesn’t matter, but the network of the organizer does. Who are they connected to? What kind of resources are they connected to? Or, call a meeting about an issue of importance in the community and see who shows up. That’s a start, but a single meeting isn’t sufficient. “We have a lot of meetings between the meetings because people will often make the assumption that people with a strong personality know what is going on, but people may be speaking in different figurative language than they’re used to. We go over what just happened and what’s about to happen.” At meetings, you’re looking for the people who show up consistently, ask good questions and throw out solutions in addition to challenges. Most people see the challenges but can’t imagine the solutions. “The easiest way is to look at what they’ve done. I think there are a lot of charlatan change agents out there. Look and see if they’ve actually made change or made things happen.” “The ability to really mobilize people is a big indicator or who the change agents are.”

Look for people who are trying to improve the world for others, not simply alleviate suffering. “A lot of good people have a charity model of the world and believe the poor will always be with us. Change agents ultimately have to see the world through an improvement frame rather than a reduce suffering frame.”

Try unusual approaches to getting people out. For example, instead of a meeting, try a project. It will bring people out who wouldn’t necessarily show up at a meeting. For example, you might not get low income single mothers to a meeting, but they might come out to do a project for their kids. If you want to find agitators, they typically sit at the back of the room or gather around the edges cracking jokes. “They often have something to bring that’s unexpected. They create their own counter narrative. If your espoused goal is poverty alleviation, you’ll want to attend to people outside the power structure.”

Map out information on potential change agents as you get to know the community. “Even when we’re exploring with a community, we begin with stakeholder groups and look at what kind of leadership there is through interviews. We’re looking for certain markers. How do they behave? Are they open to learning? Do they have a certain humility and respect for others? Are they able to move an agenda?” “We convene a small group of folks connected with different sectors of the community and map where leadership is and where it could come from in the future. We try to identify a

very diverse group." Avoid bullies. "Almost all the people that have chased us to the negative have been people who used

Think about building a network of leaders, both formal and informal, and not relying on a single individual. Networks embody strategies that contribute to resilience such as redundancy and interconnectedness.

their leadership skills to bully us into doing things. It always ended up in a mess."

Think about building a network of leaders, both formal and informal, and not relying on a single individual. Networks embody strategies that contribute to resilience such as redundancy and interconnectedness. "We think one of the most important things we leave behind is that people have more people in their networks to move their ideas forward."

"We try to map out who are the potential champions and where are they in their own leadership development. That's our starting point. The focus is to help them get a game plan they have confidence in so they can reach out to others in the community. Where we've had depopulation it's the innovators that leave. What you have is a culture by design that is resistant but you find the small nucleus that's still there and you work with them and help them work with others. Most people like being part of a winning team and you bring people on as things get a little better. As you can suspect, we were just meeting with a VP of Iowa West Foundation in IA as he asked what does it cost? We'll easily spend $50,000 of high end talent to get through this initial stage with a community. You need to send good people and they need enough contact to matter. I work right now with just seven communities. It's high touch, high quality, intense engagement. If you really want to intervene and change the momentum, you can't casually do this."

Recognize that identifying change agents and potential change agents and connecting them with each other is just the beginning. "The harder trick is helping some of these people that are interested actually step into leadership roles." Be prepared for push-back. "If you get too deep and you find out that the people put in front by the establishment aren't the real leaders or the people who will be followed, sometimes the establishment will turn on you." The U.S. Endowment should not assume that all place-based institutions are adept at identifying and engaging change agents or in fostering leadership qualities that contribute to resilient responses.

What are the Leadership Qualities That are Useful in Moving Communities Toward Greater Capacity for Resilient Responses and How Can They be Fostered?

Leadership qualities most useful in moving communities toward resilience include:

- Belief in the possibility of change.
- Concern for the greater good.
- Understanding of broader regional, national, and international context.
- Willingness to network and join forces with others.

Leaders who foster resilient responses are open- minded, tolerant, and able and willing to work across boundaries with people who do not necessarily share their interests or values. They are able and willing to listen with respect to a diversity of viewpoints and are genuinely curious to hear others' stories and struggles and to learn about solutions that have worked outside their own community. They have a positive perspective and believe in the possibility of change. They are blessed with a sense of humor and willing to celebrate small steps. They need to be in it for the greater good, not personal gain. They have and share a vision.

Leaders who foster resilient responses can understand what is happening in their communities within the broader regional, national, and international context. They strive to understand the inter-relationships among the stressors affecting

It requires commitment. A very special drive that comes from deep inside and makes you wake up every day and try to get something going and make it better for other people.

their communities. Leaders who foster resilience are not afraid to tell the truth, even when it's considered anathema or sacrilegious. They are able to inspire confidence in others and lead by example. They make sure that decision-making rules are explicit and that everyone knows and plays by the same rules. Most of all, they are persistent, patient and steady.

Leaders who foster resilient responses do not work alone. They lead as part of larger networks and have an ability to mobilize the right people for the right jobs. They recognize their own strengths and weaknesses and work effectively with others. "For a community, you need three leadership skills. Very seldom do you have all three in one person. You need organizers who network and bring people together. You need leaders who are full of information and history and who understand how and why decisions are made. And you need leaders who sell the solutions to the community. Those leaders have to find ways to work together, because you need all three." Resilient communities have leaders who reach across sectors, connecting business, nonprofit, and public sector interests and resources, and across classes and races. For example, "instead of simply adding a few African Americans to the board, the Pointe Coupee Community Foundation had an event and let the community know that anyone who brought a dollar or more could be a member. They went out in person to the churches to encourage people to come. They saw African Americans on the supply side as the best givers in town, not just the demand side."

What do we Know About How to Foster This Kind of Leadership?

Fostering leadership for resilience requires:

- "Leadership space" that accommodates and supports different types of personalities.
- Access to tools, strategies, techniques, information and resources previously unavailable.
- Help in understanding how things work and how to find answers to questions.
- Sustained access to decision-makers that builds relationships.
- Basic skills in running meetings, outreach, etc.
- Opportunities for peer exchange inside and outside the community.
- Capacity to work with outsiders without losing control.

If these types of leaders are to emerge and thrive, there must be a "leadership space" for them that accommodates different types of personalities. "It's terribly risky to be a leader, so you need to find a way to make a safe space for it. Somebody has to name whatever the problem is and propose that the community is capable of doing something about that. Once you set that context and make an open and transparent process it reduces the risk of people coming forward because you're trying to create a process for social change. Being part of a group brings down individual risk." "We have had the opportunity to create different kinds of spaces including a leadership program that brought together folks from different gender and race backgrounds in a really powerful space around what do you need to be a value driven leader. We've got to work with what we have for leaders and really provide learning opportunities for them to be better in ways that are really important to them. Now these 30 people who went through this joint learning experience can call each other for help." Leaders need networks of support to share the work and responsibility. Some of the most important "leadership spaces" are informal. "You have to mix it up and have venues for us to be social beings. There's a lot of knowledge out there but how do you share that knowledge if you don't have a social learning mechanism (coffee houses, etc.) that's informal enough to allow people to participate."

"War rooms" are another form of "leadership space" where leaders can come and share information and put things all over the walls. Another aspect of creating "leadership space" has to do with giving people access to tools, strategies, techniques, information and resources they didn't have before. This doesn't have to be an overwhelming process. "We're working on conservation-based affordable housing. The Community Development Corporations didn't know about landscape architects. They went straight to engineers. Just that little bit of information has shifted the way the Community Development Corporations are planning out their neighborhoods." "A lot of people don't take up leadership roles because they don't know how things work. Something as simple as teaching people how to make a will can make a real difference in leadership quality."

> *"A lot of people don't take up leadership roles because they don't know how things work. Something as simple as teaching people how to make a will can make a real difference in leadership quality."*

Another way to create "leadership space" is through participatory research. "We came to that because the very same thing was happening where researchers use communities and don't give anything back." "The guy who does our community mapping project did an incredibly interesting project with haddock fishermen in the Bay of Fundy. They went out with GPS units to places where they had once had successful fishing and they knew were historic spawning grounds. They did it over time, about 25 years. It took the local knowledge to show what had changed. It really empowered fishermen to speak on behalf of the fishery and be able to come to the table of policymakers and present this information. It's information that never would have come to light under many scenarios. And there are people who would not have had the confidence to use their knowledge to talk about how decisions might be made."

When community representatives have not been part of the discussion about matters that affect them, like, for example, national land trusts' plans to purchase large quantities of forested land in their community or the fisheries example above, giving them a seat at the table for one meeting does not create the capacity for resilient response. Rather, the door needs to be opened and kept open long enough to establish relationships and influence decision-making. "It's a practice issue as much as a skill development issue." People need practice being leaders.

Leaders need basic skills such as knowing how to set an agenda, run a meeting, document a meeting, and build networks. There are a plethora of leadership training programs that cover basic skills. However, not all leadership training programs are created equal. "There isn't a leadership development program for people in community forestry, and there isn't a program for women." "We need programs to train leaders of color." As we've seen, building the capacity for resilient responses to stressors involves embedding these skills in a philosophy (and behaviors) of openness to people and ideas, shared leadership that emphasizes creating functional institutional arrangements, strong and diverse networks, and new information. This might include specific attention to reaching out across generations and to underserved and excluded communities. These components of resilience as applied to the leadership function echo strategies discussed in the literature that are believed to increase or improve a system's resilience. Many of these apply to the leadership

function itself as well as to communities as a whole and the interventions they design. For example, redundancy and decentralization are well established strategies to achieve resilience. To the extent that community leadership is shared and decentralized, community capacity to respond to stressors is likely to be enhanced. Multiple leaders in complementary roles increase the community's capacity for self-organization, another feature of capacity for resilient response.

Leaders also need opportunities for respite. "We provide a $3,000 stipend to go wherever they want to go and relax. We stipulate that the money can't be spent on their nonprofit or in their community. We did about 45 of those rewards. It was a really powerful experience to offer people respite. We were giving them permission to do this one selfish act. They couldn't make it about someone else."

Peer exchanges among people learning to be leaders for community resilience are really important, according to interviewees. "It's really people that are most nourishing to people. There do need to be networks among groups and leaders. If people are operating in isolation, this stuff will not work very well. There's the ability now to get people in the room to a certain degree without having to travel. If you really want to give people a shot in the arm, get them together face to face with people they find inspiring. People need to be inspired and have contact with others who are inspired." "We've started lunch and learns to bring leaders of groups together. We support the lunch, find the space, and decide the topics. We're trying to bring people from different neighborhoods together. We pair groups and have them learn from each other. We actually fund mentorships." "I think many of the communities have a growing confidence that they can have a voice. I think they are learning they are not alone. The more we can link individual communities to one another so that they better understand and see that they're part of a larger picture" the better. "We need to be sharing experiences among communities so that we don't have a bunch of little islands." "If you've got a group of enlightened people and they want to change, then you expose them to places that are where they want to be and you show them what those places did."

However, care needs to be taken in how and when these exchanges are structured. Leadership programs that remove people from their communities and introduce them to new people and possibilities before they are rooted as leaders in their own place often result in brain drain rather than enhanced community capacity. Training must be balanced with and support action. "What we found was that the energy was sapped to do work on poverty by having to go through all the training first. If there's an issue at the front end there needs to be support for action, not just training." Training through action is the ideal and a documented best practice. "Communities are at different readiness points to begin with. There are some communities where they are not interested in leadership; they want to do a plan or a project or something else. We offer leadership training as a first step, but we're not bound to it. We integrate a project within the leadership training because it's important to do something concrete as you're moving along. It's proved to be very effective. It is small scale activity but it builds trust and networks." Once rooted leaders have bonded, there can be great power in sharing a learning experience outside of the community such as a trip to explore another innovative community.

Leaders motivate involvement in community process. Sometimes this takes years. "If there's not enough interest, you're the lone ranger and you just do what you can do and sometimes that happens and then it causes somebody else to do something." "You have to take time to let communities self-organize. It might not work and you might not get the answer you want. It's key that you keep the momentum going." "Intergenerational leadership and next generation leadership is just critical to the South. We have young people in the region who are more in tune with the opportunities and challenges of right now and the future and they are ready to start taking more responsibility. At the same time, they need leadership development. We have to figure out a way to get them into greater leadership roles and at the same time help my generation help the next generation along."

Leaders with the right qualities are essential to the capacity for resilient responses. Outside resources can help or hinder depending on what they are and how they are used.

How Can Outside Resources be Most Effective in Building Community Capacity for Resilient Response?

Outside resources can be most effective in building community capacity for resilient response by:

- Keeping communities in the driver's seat.
- Working with community resources whenever possible.
- Mentoring community members and building capacity through skills development.
- Offering outside perspectives and new information.
- Facilitating when local capacity is lacking.
- Naming and surfacing underlying conflicts.
- Being flexible and nimble in responding as needs arise.
- Building and maintaining long term relationships with communities.
- Fostering peer exchanges.

The role of outside resources in building community capacity for resilient response to stressors is tricky. On the one hand, resilience in the face of a transforming economy requires connections to ideas, information, markets, and resources that allow communities to forge new patterns of economic integration. On the other hand, unless communities are in the drivers' seat, the capacity for resilient response will be short-lived at best. "If they hand over decision-making authority to someone from the outside that's a big mistake because outsiders don't know as well as they do what kinds of things will work." "On the community side, the culture has to be one of openness and inclusiveness and clarity about what they need from external resources and at the same

time being open to what they don't yet know they don't know. But there has to be a clear understanding that anyone coming in from outside is working for the community, not the other way around. The community is in charge."

We asked interviewees to discuss when it is important or necessary to draw on outside resources and when it is advisable to draw on resources internal to communities. There is widespread agreement with the principle, "Never do anything for a community that they can do for themselves." "If the community has the capability and you substitute outside intervention, odds are you will leave the community worse off." "The test in every case should be, 'Are the internal resources there, are they making progress, what do those internal resources need?' That's when you get the answer of when it's necessary to draw on outside resources. The signal should come from the internal resources." "It's important to draw on outside resources when you can't identify any inside resources that will fit the bill and the moment you can identify inside resources you need to shift to them."

One best practice for building the capacity for community resilience is to team external and internal resources. "An outside person who does have a grasp usually has more to offer than an inside person, but you have to team them up because they'll be gone when the contract is over and none of this happens overnight." "Team up where the outside person is giving support and providing backup. That mentoring is really important."

Another way outside resources can help keep communities in the driver's seat is by helping communities create a Bill of Rights about how people come into the community and do work. "Community members aren't paid to go to meetings. They are told that if they don't attend, they won't have a say. They are damned if they do and damned if they don't. We've been asked to help create a Bill of Rights that makes sure they are not disenfranchised."

A community or an individual or network within it must have a basic level of readiness to engage with outside resources. One indicator of a lack of readiness is when a community's resources are tied up in deep internal conflict. Another is when a community is very depressed. "We've worked in communities that are so depressed we can't get them to turn around." But even depressed communities can start to climb the ladder. "Right now we're working in a very poor and depressed and distrustful Indian village. They just received a ton of capital due to them 70 years ago when a dam was built on the Columbia River Gorge. Their long-range goal is self-governance. It's a very small place with lots of alcoholism. Some people got the money and some didn't. We are training six local people to be facilitators and they are going door to door showing respect. It's not self-governance initially. Being depressed doesn't mean you can't do something, it just may be a very different first step and it is not formulaic. Our outcomes are going to be six facilitators. Even if we do nothing else, if there are six people who can deal with conflict and have good conversations that's a good leave behind. Don't over promise or over expect."

Facilitators available to help work through controversy and help people imagine solutions can be very helpful. "People need the right tools for internal resources to be tapped. You can't just ask people what they think. You need to be able to engage them on a creative level." "Helping groups think about how they change things and how change happens is important." On the road to resilience, communities may need specialized expertise in areas like cooperative finance without which they become stuck. Sometimes, just having an outside perspective or an "outside voice of reason" can be very useful in helping a community reframe their sense of what is possible. Outside resource people can amplify community networks and help communities connect and build the capacity to connect to additional external resources. "I think very few communities can make a significant change or be set on a more resilient trajectory without outside resources.

Sometimes, just having an outside perspective can be very useful in helping a community reframe their sense of what is possible.

It's the identification of the kind of assistance and the person to provide that assistance that's essential. That's why we developed the Collaborative Network, so we could pair the most appropriate person with the need. Most people call asking for money and you talk and find out it's not the money they need, it's someone to do strategic planning or they just can't communicate about a divisive issue without a facilitator. It's hard for people to admit or even know they need help because they are so into the day to day environment. We've found that we have to be much more active in outreach to people through peer learning conference calls to find out what they are struggling with."

Community processes that create a "leadership space," help shape shared understandings, lead to exchange of new information, and help communities formulate shared goals can but will not necessarily contribute to building capacity for resilient response to stressors. "I think those communities that have alignment around a vision for what they want to be have a lot easier time moving on opportunities than those that lack an aligned vision about their community identity." However, "visioning without accompanying action leads to apathy. You don't do it until you know you have enough of a core committed to follow through and do something. You can actually set yourself back by visioning when you are not ready for it." The hard work begins when the community tries to implement its vision. "A great idea is not worth a dime; a great idea that is implemented is worth a bazillion. You have to have the management skills and people who can actualize a community vision or the vision process is no good. That's hard work. Visioning is easy work. Making it happen is hard work."

Developing community capacity for resilient response is

a long term proposition. Communities benefit from having a support system of outside resources they can call on as needed. Outside resources, to be most effective, need to have their hand on the pulse of the community to identify strategic intervention opportunities. Small, catalytic grants can make a difference. "The ability of communities to respond to crises and opportunities sort of ebbs and flows. We're trying to be enough in tune so that when the groups we work with hit a snag, we can help them develop the capacity they need." "We believe communities know best what they need. We say you tell us what you need and how what you're proposing will create improvement in the economy, the environment and the social framework. When we first started doing that people didn't understand, but when we sat down and talked it through, they realized they were already doing it. They had it so compartmentalized they didn't know it. In addressing social justice issues, they were actually helping people improve the environment and the economy. The work that's successful is successful because groups are really creating change and addressing things in a holistic manner." Understanding the interconnectedness of community, environment and economy in a particular place may be instrumental to engendering resilient responses to stressors. This is not a common way of thinking among service providers. To promote the capacity for resilient response, groups and individuals offering services to communities should, ideally, be working within a systems framework and should be able to help communities learn to think in systems also.

If we truly want to move forward this idea of community resilience and community wealth, we have to learn to listen better. In policy, people do what they want to do, not what communities are asking them to do.

"West Central Initiative is a really good example because it shows the power of having an organization with flexible resources that is focused broadly on improving the viability of a region and isn't subject to traditional political manipulation. That combination works. Having that flexible chunk of assets and that place where you either have the knowledge base or people who know how to get the knowledge you need. That trusted intermediary communities can turn to when they have issues. And that can take regional leadership."

"A new kind of professional is needed in this work – not community organizers but a business coach, strategic intervention manager, almost in the way venture capital firms can work with businesses."

In the aftermath of Katrina, organizations like Southern Mutual Help Association, Rural LISC, and PolicyLink showed up along with loaned executives from organizations around the country and they added capacity that made a difference. Major organizing groups like ACORN helped people come together, decide what they wanted, and go to places of power to hold decision-makers accountable. "They really helped create equity."

Unfortunately, many communities do not have access to outside resources on a flexible, as needed basis. Instead, if they have access at all, it is often through one-time consulting contracts of limited scope and duration or through compartmentalized programs that focus on only a single aspect of the need. "I think part of the problem is the playing field around the country is not equal. I look at places like North Carolina or Iowa and the chances are, if you have a community and you're willing to work, you have rich resources that can help you. Then I look at other places with the same agencies but they're in a very programmatic mode that gives dollars to communities that can write applications so the really needy places get bypassed. In many places it's 'We'll deliver this program, but we don't have the resources to get involved with you." "I think too much of the technical assistance that's going on right now is for just one thing, a meeting, a feasibility study. Communities need more technical assistance that will help them over a range of projects and issues that helps bring those projects and issues together because they don't implement in a stovepipe way. It's a problem with the technical assistance mechanism we have right now. There isn't a big enough pool of helpers for the communities and the range of issues they are dealing with."

It is time to consider inventing new forms of support for forest-based communities that will better enable the capacity for resilient response across sectors. In the private sector, "I've always wondered, can you create a gap business management team that could work regionally, get to know the culture of the region, be successful business people who could go in to the businessman who says he would like to grow and help him analyze and implement becoming more successful and put more people to work?" In the public and nonprofit sectors, "I think we're at a point where there's a new kind of professional needed in this work – not community developers, not community organizers, but a business coach, strategic intervention manager, almost in the way venture capital firms can work with businesses at points. We let too many things go for too long. If you really take the intervention model seriously, you have to identify people with various kinds of expertise who can really do this intervention work or help facilitate it." "We're beginning to reinvent the role of program officers. They're becoming business coaches and intervention managers in a sense of continuing to be in dialogue and working alongside our grantees in a way that continues to take the temperature and gauge successes and challenges and not waiting." Of course, this approach, if not carried out in true partnership with a strong mentoring component, runs the risk of usurping

community control. Outsiders can be unaware of their own norms and cultural biases which, when projected uncritically on a rural community, can be damaging.

What Other Factors Would Help Communities Become More Resilient?

Other factors that would help communities become more resilient include:

- Making risk capital available to businesses in the form of grants instead of loans.
- Fostering more collaboration between rural and urban communities to identify shared solutions.
- Making policy makers aware of the impacts of their decisions on rural communities.
- Providing technical assistance in creating, obtaining, and analyzing relevant information.
- Improving mechanisms for aggregating, attracting, and investing local financial capital.

Creating the capacity for resilience in forest-based communities requires placing natural resource-based economies and concerns in a larger context that includes non-resource-based businesses as well. "If you can maintain a business sector in a community it helps dramatically to provide resilience." One way to help forest-based communities diversify their economic base is to make risk capital available to businesses. The existing financing structure offers grants to nonprofit organizations and loans to businesses. "Loans do not encourage people to fail. Loans are for after you have a plausible business. Getting grants to businesses encourages them to fail and learn. There aren't many mechanisms for that. Someone has to buy down the risk for the private sector to innovate." The Small Business Innovation Research program does this at the federal level. State level policies that help build local endowments through tax credits and appropriations could make a big difference.

"I think that to promote greater resilience we have to develop more collaboration between rural communities and bridge the rural-urban divide. I remember reading that communities that are better at sharing information or sharing seeds at farmers' markets, speaking other languages, etc. have a higher capacity to adapt to change. I think rural communities in the U.S. need to share 'seeds,' share ideas, thoughts, solutions, and converse about these things. The internet makes so much possible in terms of creating dialogue that can be productive in promoting resilience. But we need better access and more interactive and creative design to make it more engaging and we need more forums for communications." "One of the linkages that could be strengthened is this rural-urban connection to educate urban consumers about where their food and energy and fiber come from. I also think community forestry groups need to become part of a larger coalition around rural America." "I think there has to be outside investment, but it doesn't have to be charitable per se. Rural areas are the keepers of clean air and water that urban areas may not have. That's a huge stewardship." Any cross boundary negotiations, including rural-urban dialogue, requires skills in 'boundary management' including, but not limited to: finding partners, translating concepts and developing shared language, mediation, negotiation, and shared creation of new knowledge (Cash et al. 2006). For issues related to sustainable forest management, the different temporal scales between human and ecological processes affecting forest change must be addressed, the gap between traditional and scientific knowledge of forest and community must be bridged, and the global as well as local context must be taken into consideration (Papaik et al. 2008).

The capacity for response must connect communities not only with themselves and each other, but with the external institutions whose decisions affect their realities. For example, respondents suggest we need to make policy makers cognizant of the impact on the middle class of regionalizing public sector services and eliminating public sector jobs in small communities. "If you really want to rebuild a rural economy you can't just walk away from the middle class and say 'We're going to wait until you're as poor as the others before we help you.' That's an insane strategy. You can't have everybody completely screwed up or you end up with chronic poverty like in Appalachia. We need to retain and rebuild the infrastructure that creates the middle class." "In many rural communities, the public sector is the largest employer, so when you regionalize you're taking the biggest employer out of the community." Strong K-12 education in rural communities has multiple benefits. It educates youth, brings the community together, is a locally owned asset and gathering place, and provides stable middle class jobs for people with good skills.

It is very difficult for small communities to find the information they need to make better decisions. "There's a lot of information out there in the universe but not a lot of ways to filter it and go through it. Having more regionalized ways to get and sort through information is really going to help a lot of these communities. They need a lot of technical assistance that is aimed at dealing with how you rebuild your private sector in a way that will help you have the community you want in the future. Across the West we have all these consultants showing up to build a biomass plant. Being able to know how to deal with all these people coming in with the shining coin will be important. Having technical assistance that has the communities' best interests in mind will be important." "I think the kind of information the Carsey Institute does but regionally; trends affecting different regions of rural America that are close enough to communities in rural areas so they actually make sense."

"We need a vehicle for attracting and investing capital at the community level." There is capital in rural communities, but often it's illiquid and when it becomes liquid there isn't a clear set of local investment opportunities. Community banks used to allocate local capital to local investments but they are no longer there in many communities. Some kind of similar

mechanism needs to be recreated.

What are the Tools That Can Help Build Community Capacity for Resilient Response?

When asked "Are you aware of any tools available to communities to assist in understanding, measuring, or building their resilience to stressors or to assist them in understanding, measuring, or building community wealth?" interviewees identified tools in four basic categories: 1) assessment tools; 2) tools for (re)imagining the future; 3) tools for dialogue and learning; and 4) technical assistance resources. An annotated list of specific tools can be found in Appendix A to this report.

Interviewees identified tools in four basic categories: 1) Assessment tools; 2) Tools for (re)imagining the future; 3) Tools for dialogue and learning; and 4) Technical assistance resources.

Assessment tools provide a structure within which a community can reflect on its situation, structure, and assets and its established ways of responding to stressors. The process of assessment can be useful in helping communities see themselves as they are and identify areas for improvement. The assessment process is most meaningful when it is conducted in light of specific goals a community wishes to achieve. Assessments can be good conversation starters but, by themselves, they do little to change community capacity.

Any kind of planning activity provides a framework within which to (re)imagine the future. Scenario planning presents plausible "what if" stories or narratives that describe how choices made today and in the future will shape alternative future realities. Scenario planning is part of a technique of structured dialogue among stakeholders whose futures are intertwined but who often oppose or ignore each other. It is a civic dialogue tool that focuses on the future instead of the past or present.

Tools for dialogue and learning include: appreciative Inquiry, consensus building, mediation, problem-solving, and situated learning among others. These tools are related to community resilience in that they support open inquiry and listening and help create safe leadership spaces where new voices and opinions can be heard.

The ability to transform rural communities is right there on the surface if we can get them talking to each other.

Interviewees identified a range of technical assistance providers who serve rural communities either within a specific region or across the country. Providers have their own tools and offer direct services including research, planning, facilitation, and more. There are many more providers than are highlighted in the appendix; these are ones mentioned by interviewees. None of these providers frame their offerings in terms of community resilience per se, but many of them are in the business of capacity building.

Of the tools mentioned that do not fall in any of the above categories, perhaps the most interesting and relevant to forest-based communities is Land Care. LandCare is "a uniquely Australian partnership between the community, government and business to 'do something practical' about protecting and repairing our environment. More than 4000 voluntary community landcare groups are tackling land degradation in every corner of Australia." (http://www.landcareonline.com/). LandCare has been successful in creating community involvement that develops social capital, positively impacts the landscape, and creates jobs at a relatively low cost.

It is the rare community that can take a tool down off the shelf and make it work effectively. Tools come to life in the hands of experienced users that can guide communities with confidence.

What New Tools Might be Needed in Helping Communities Build Capacity for Resilient Response?

There are certain areas that interviewees feel are not being adequately addressed by existing tools and available expertise. The four areas that most need to be addressed would help communities:

- Understand the stages of community resilience and find their place in the process.
- Learn and use systems thinking in designing and implementing solutions.
- Reorient from emphasizing productive capacity to emphasizing adaptive capacity for long-term sustainability.
- Hold bridging conversations.

How do we Help Communities Understand the Patterns or Stages of Community Resilience?

"I think if people in communities understood what the characteristics of resilience are and they could see specific examples over a period of time, I think they would get it. I've always been interested in company towns and there is a pattern and a time frame that is playing out over and over again in front of my eyes. There is when the company pulls out and the community is left with a vacuum and it takes a generation before there's a willingness to think about what to do next. Then it takes another 5-10 years to build the institutions and train leaders and get people to think about what might happen. Wouldn't it be fascinating to see here's where you are on the growth chart? It would be so reassuring. It is reassuring to know that this happens in every community and it also helps if you say this is what you can do to minimize the stress. If you knew where you were on the path, it would be incredibly helpful in

knowing how to deploy resources."

How do we Help Communities Learn to Think Systemically About Their Issues and Opportunities and Plan and Execute Interventions That Create Social, Environmental and Economic Wealth Simultaneously?

Experts called for new tools to help communities understand and weigh the costs and benefits of various forms of development within a triple bottom line context. For example, some types of development might be beneficial economically but not socially (e.g. certain types of public sector consolidation). Others might be beneficial economically but not environmentally. Some may have social and environmental benefits that outweigh economic costs. The best investments are those that have benefits across the board. Sometimes these benefits are not recognized. For example, investing in broadband access may create new employment opportunities for local youth. What kinds of businesses could local youth create if they had broadband access? "It might be worth twice as much to invest in a local young person's business as in industrial recruitment," if the social benefits were taken into account. Thinking in systems would include understanding the difference between economic activities that are extractive or have minimal local benefits and those that create meaningful local multipliers. Sometimes simply changing the way in which an activity is carried out can dramatically affect associated local multipliers as when local governments choose to obtain goods and services from local firms instead of importing substitutes from outside the local area.

How do we Help Communities Transition From Focusing on Their Productive Capacity to Focusing on Their Adaptive Capacity?

"The transition to sustainability derives from fundamental change in the way people think about the complex systems upon which they depend. Thus a fundamental challenge is to change perceptions and mind-sets, among actors and across all sectors of society, from the over-riding goal of increasing productive capacity to one of increasing adaptive capacity, from the view of humanity as independent of nature to one of humanity and nature as co-evolving in a dynamic fashion within the biosphere" (Carl Folke et al. 2002). Communities that are engaged in citizen monitoring have taken an important first step in this direction. Additional tools are needed to help communities think through and then implement responses that increase their adaptive capacity while accomplishing effective integration into a transforming economy.

How do we Help Brave Individuals in Communities Hold Transformative Bridging Conversations?

"The first part of bridging would be – how do you ask the questions about bridging? How do you incorporate that into the natural flow of things? I believe you have to be able to ask the questions in ways that will be productive. Now, people don't even ask. " Building bridges across race, class, ethnicity and other social divides is key to releasing energy and resources for creative responses to stressors that work for the common good. "There may be tools and materials from reconciliation activities in South Africa and elsewhere that could be applied in rural communities with historical divisions. However, to be helpful in this process, an outsider must first be in deep relationship with at least one insider. "If you're in a relationship with people, you can do it. Otherwise, you're just somebody they don't know, don't trust, who is a pain in the neck."

6. SUMMARY AND NEXT STEPS FOR THE ENDOWMENT

In this report we have offered a brief review of the research literature on resilience and a synthesis of how community development practitioners think about community resilience. This has allowed us to make suggestions for how the Endowment may wish to adapt its own understanding and definition of resilience to better reflect the broader understanding evident in the scientific and practitioner communities.

We have also identified characteristics of resilient and non-resilient communities and the variations between these two ends of the spectrum.

Moreover, we have used the scientific literature and practical experience of communities to suggest ways in which communities and outside institutions (governments, foundations, the Endowment, and others) can foster the development of greater resilience in rural, forest-based communities.

Finally, we have collected and categorized a number of specific tools that have proven useful in various contexts in supporting communities' efforts in moving toward greater resilience.

Recognizing that the Endowment is interested in continuing its work on resilience, we offer the following suggestions for next steps:

1) Share this research with the field and solicit feedback and recommendations for next steps. Recognize that creating community resilience cannot be achieved by any single intervention or any one intermediary organization. It is a complex endeavor that succeeds over time only with the active ownership and engagement of a motivated community which may take years to enable.

2) Create and field test a simplified tool for community-level assessment based on the revised definition of resilience and a more developed characterization of the stages of resilience, perhaps in consultation with Community and Regional Resilience Institute (CARRI). None of the tools identified through this research address all components of the recommended definition nor are they based on a model including stages of community resilience.

3) Consider investing in researching and developing tools and training in reconciliation to be used in communities with long histories of racial and/or class conflict.

4) Review the Endowment's existing and planned endeavors in the context of an expanded understanding of community resilience to identify opportunities for new work or adjustments to existing work that would promote community resilience.

5) Work with existing grantees to create baseline measures of community/regional resilience and indicators of progress that are region-specific.

6) Support (regional) networking efforts among rural communities to exchange information about resources, trainings, tools, etc. that have proven useful to others including, but not limited to: scenario planning, You Get What You Measure®, LandCare, HomeTown Competitiveness, and Western Collaboration Assistance Network. Consider sponsoring technical assistance grants to bring these tools to wider audiences. Promote peer to peer learning for community members.

7) Provide support and resources to intermediary institutions capable of forging long-term relationships with vulnerable communities and achieving a healthy balance of internal community capacity building and external assistance. Promote peer-to-peer learning in a non-competitive environment for intermediaries.

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BACKGROUND ON REPORT AUTHORS

Shanna Ratner, Principal of Yellow Wood Associates, has been active in the field of rural community economic development for over 24 years. Her knowledge of capacity building, a key ingredient to community resilience, was enhanced by membership in the Aspen Institute's Learning Cluster on Rural Community Capacity Building in the 1990s. Her understanding of systems thinking and the inter-relationship of wealth of all forms and resilience was further informed by her experience as a Donella Meadows Fellow in Systems Thinking, beginning in 2002. Since that time, she has worked independently and is currently working with the Ford Foundation on articulating a wealth-based theory and practice of rural development designed to reorient the field toward triple bottom line strategies that restore, create, and maintain wealth in low-wealth rural areas. Ms. Ratner was the Principal Investigator for the National Community Forestry Center, Northern Forest Region 2000-2004 and developed and trademarked See the Forest®, a program to educate forested communities about how to capture the multiple value streams forests have to offer.

Susanne Moser, Ph.D., is Director and Principal Researcher of Susanne Moser Research & Consulting, a recently established firm in Santa Cruz, CA. She currently works with the state of California, helping to support the development of social-science informed adaptation strategies and policies. Her current research focuses on adaptation to climate change in the coastal sector, the development of effective decision support systems, communication for social change, and on resilience in the face of rapid environmental and social change. She is deeply steeped in the social-scientific hazards and climate change research traditions interested in better understanding community and regional resilience. Prior to her arrival in California, Dr. Moser worked as a Research Scientist from 2003-2008 at the Institute for the Study of Society and Environment (ISSE) at the National Center for Atmospheric Research (NCAR) in Boulder, CO; four years as staff scientist for climate change with the Union of Concerned Scientists in Cambridge, MA; and as a researcher for the Heinz Center in Washington, DC in 1998-99. She is a geographer by training (Ph.D. 1997, Clark University), with research interests for the last 15 years in the human dimensions of global change. Dr. Moser was selected an Aldo Leopold Leadership fellow in 2005, a Kavli Fellow of the National Academy of Sciences in 2006, and a Donella Meadows Leadership Program fellow in 2007-08.