

Resilience Ecosystem Theory of Change

Problem Statement

Human-caused global warming and natural climate variability produce extreme weather and climate events that adversely impact human and natural systems.^{1,2,3,4} These extreme events are projected to increase in intensity, duration, and frequency.^{1,5} The risks we face aren't solely climatic; our built environments and infrastructure are generally poorly adapted for the temperature, precipitation, and sea level extremes we are likely to experience this century.^{2,6,7,8} Arguably, these risks are greatest among our nation's poor, elderly, and minority populations who are least able to get out of harm's way and have limited access to information and resources to help them adapt / build resilience.^{2,9,10}

Unless substantial large-scale action is taken to address these and other climate-related risks, the impacts on human and natural systems are likely to continue and worsen this century.^{1,2,5} Consequently, we're seeing large and growing demands for decision-support tools, expertise, and funding.¹¹ No single entity is sufficient to meet the nation's needs. To achieve the efficiencies and economies of scale that are required, we must build a public-private partnership—a “resilience ecosystem”—that enables us to cooperate instead of compete and/or remain in a “siloed” mindset.

What is the “Resilience Ecosystem”?

The Resilience Ecosystem (RE) is *an open and inclusive community of public and private entities working individually and collectively to help communities and businesses in all U.S. regions and sectors to adapt / build resilience to climate-related hazards*. Though there are federal and non-profit entities committed to sustaining organizational and financial support for it, the RE is not an entity, organization, or professional society; it is not “owned” by any person or group and it doesn't seek to compete with anyone.

The Resilience Ecosystem aims to achieve **four ultimate outcomes**:

1. accelerate and grow the number of adaptation / resilience-building actions taken in communities and businesses all across the nation;
2. provide equitable access to the resources and decision services needed to reduce climate-related risks among all U.S. populations;
3. reduce loss of life and damages to human and natural systems from extreme events; and
4. strengthen our economy and increase job growth in adaptation science and services.

Our Goals & Objectives

Stated simply, the RE is about people using science and shared strategies to adapt / build resilience to climate change. To achieve these ultimate outcomes, everyone in the resilience ecosystem must work synergistically to reach **two long-term goals**: (1) measurably increase the RE's capacity, efficiency, and economies of scale in providing adaptation / resilience services to the nation; and (2) measurably increase the funding available to the RE via annual grant competitions designed to incentivize collaboration within the RE. Each of these goals positively reinforces the other.

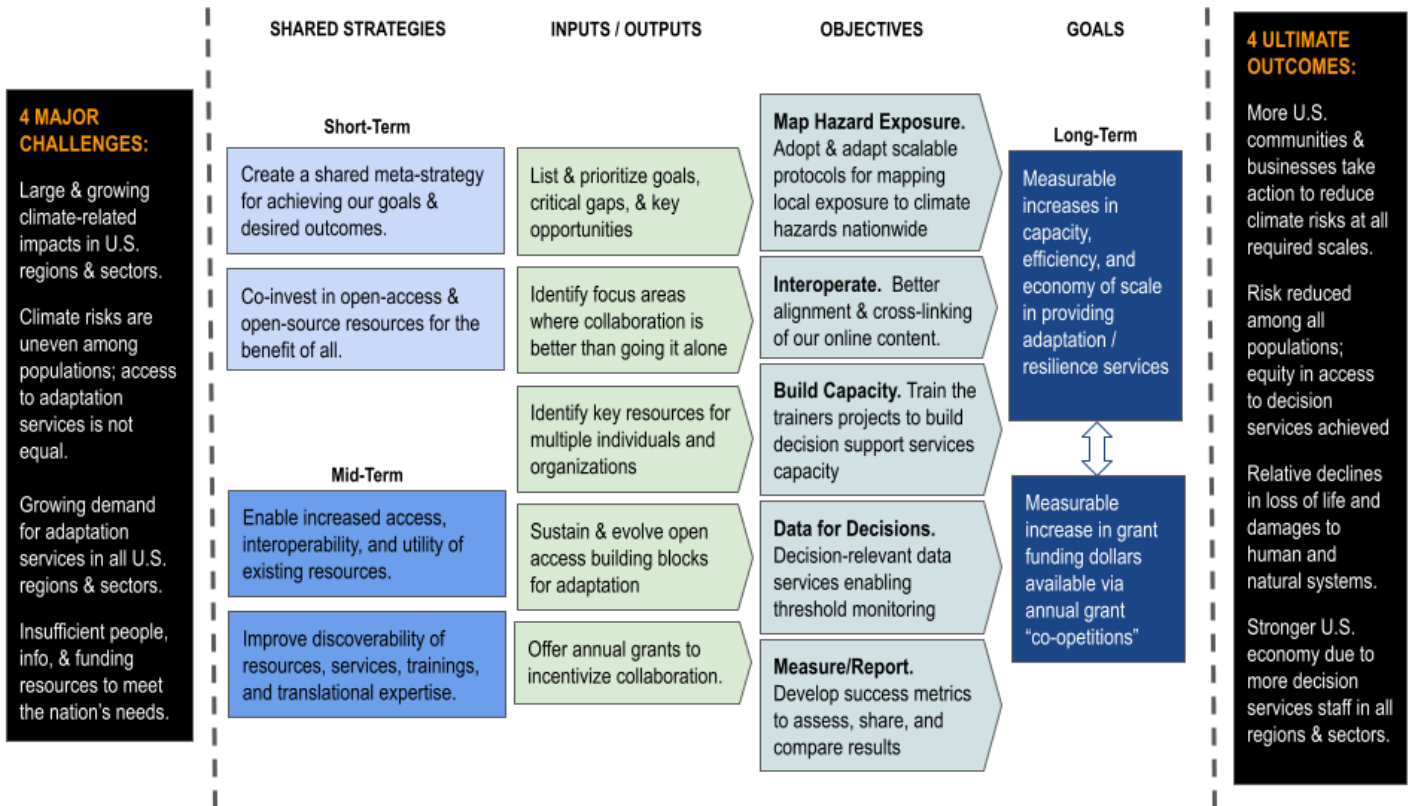
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Near-term goals: (1) co-produce and collaboratively execute a shared strategy and game plan by which the RE can achieve desired outcomes and long-term goals; and (2) to identify and co-invest in the development of common “building blocks” (open-access data, tools, expertise, and funding resources) for the benefit of everyone working in the RE.

Mid-term goals: (1) purposefully enhance and evolve the utility, interoperability, and accessibility of the RE’s building blocks; and (2) promote greater awareness and use of the RE’s resources, services, training, and translational expertise.

The RE will collaborate on a variety of projects to accomplish the following **five objectives**:

1. Measure and map local exposure to climate-related hazards all across the nation.
2. Harmonize our semantics and meta-tagging schemas to make our online content more discoverable and interoperable.
3. Build the RE’s decision-support capacity through train-the-trainers workshops.
4. Evolve our online services to provide data-driven answers to users’ questions pertaining to threshold exceedance, asset management, and long-range planning.
5. Establish common success metrics to help us assess, share, and compare our results over time.



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