

# Increasing Resilience in a Changing Climate

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Long periods of drought, unprecedented storm events, warmer average temperatures, rising seas, unpredictable weather patterns—we are already seeing the impacts of a changing climate. Whether we like it or not, we are entering a period of warming on a global scale that is shifting weather patterns everywhere.

Here in the Southwestern United States, these changes are being expressed through reduced snowpack, shifting precipitation patterns, decreased water supplies and increased temperatures. As a result, we have already experienced catastrophic wildfires, flooding and reduced agricultural yields—trends we expect to continue.

Fortunately, there is something we can do about it. Seeing these patterns take hold, The Santa Fe Watershed Association (SFWA) contracted with the Model Forest Policy Program to develop a climate adaptation plan through its Climate Solutions University (CSU) planning process. Under the MPP's guidance, I led a team of experts from the greater Santa Fe community, including former city of Santa Fe Water Resources Coordinator Claudia Borchert, Jémez y Sangre Regional Water Planning Council Chair Charlie Nylander, Ecotone Executive Director Jan-Willem Jansens and La Cienega Valley Association President Carl Dickens, to develop a holistic approach to address the most pressing vulnerabilities and create an action plan to add long-term resilience to the watershed and Santa Fe community.

Over the course of several months, the planning team studied the predicted climate shifts as well as the forest-, water- and economic vulnerabilities of the area. From this information, we used a prioritization system to analyze the climate risks and determine the areas of highest priority. Perhaps not surprisingly, the resulting priorities include: reduced water supplies; increased risk of wildfire and forest degradation; flooding; and a dearth of job opportunities to retain and attract working families. Taking into consideration the pillars of sustainability (environmental stewardship, economic health and social justice), the planning team developed five goals that address these issues and have the greatest chance of long-term success.

**GOAL 1: Increase the water security and ecological integrity of the Santa Fe Watershed through conservation, infiltration, groundwater recharge and reuse.**

**GOAL 2: Improve forest health for resilience in the face of climate change.**

**GOAL 3: Develop the workforce training needs to implement this plan.**

**GOAL 4: Increase energy efficiency and renewable energy (EERE) to achieve a reduction in fossil fuel-derived and water-consumptive energy sources by 45 percent by 2030.**

**GOAL 5: Establish financing systems that facilitate (equity) investments, emergency funds and cash flow availability to fund climate adaptation and innovation initiatives.**

The implementation of these goals will take time and resources; however, it is imperative that we continue to address our vulnerabilities on multiple levels. History tells us that when communities are faced with changes such as these, there are three potential strategies and outcomes: 1) they do nothing and are subject to the environmental impacts that ultimately destroy their cities, 2) they migrate from the area, or 3) they proactively work to adapt to the changes and ultimately thrive. What do we want for Santa Fe?

Through climate-adaptation planning we can increase the resilience of our landscapes while improving our economy and creating new job opportunities. The plan we developed, *Forest and Water Climate Adaptation: A Plan for the Santa Fe Watershed*, outlines specific strategies and action steps to safeguard water resources and reduce hazards from storms, fires and floods. These strategies include increasing rainwater infiltration, developing municipal water reuse systems, expanding forest-thinning treatments, improving the functionality of our rivers and arroyos, promoting energy efficiency and renewable energy, and developing long-term financing structures that enable all of this work to be implemented.

In order to ensure lasting change, everyone in the community will have to participate. To be a part of the solution, you can conserve water and energy, increase the permeability of your landscape, capture rainwater, reduce fuel loads on forested properties, support local farmers, and invest in renewable energy.

Our overarching goal is to ensure that Santa Fe thrives for centuries to come. What will be your role in shaping Santa Fe's future?

*To read *Forest and Water Climate Adaptation: A Plan for the Santa Fe Watershed*, visit [www.santafewatershed.org](http://www.santafewatershed.org).*

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