

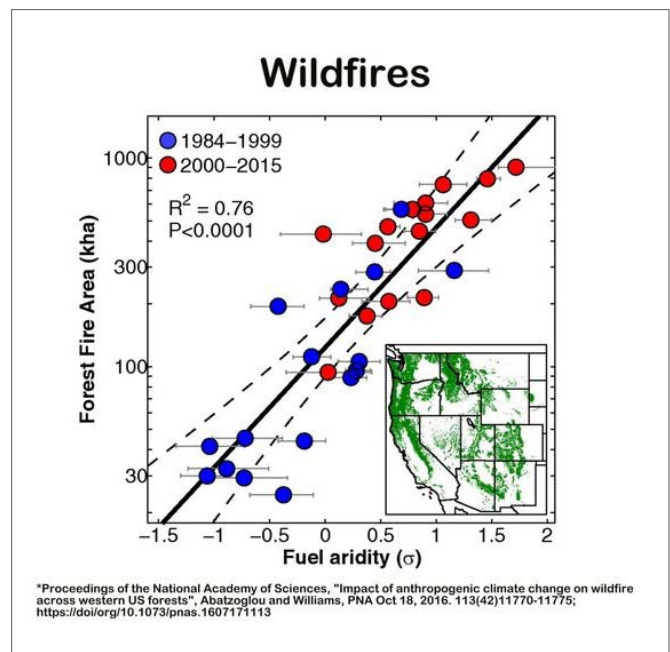
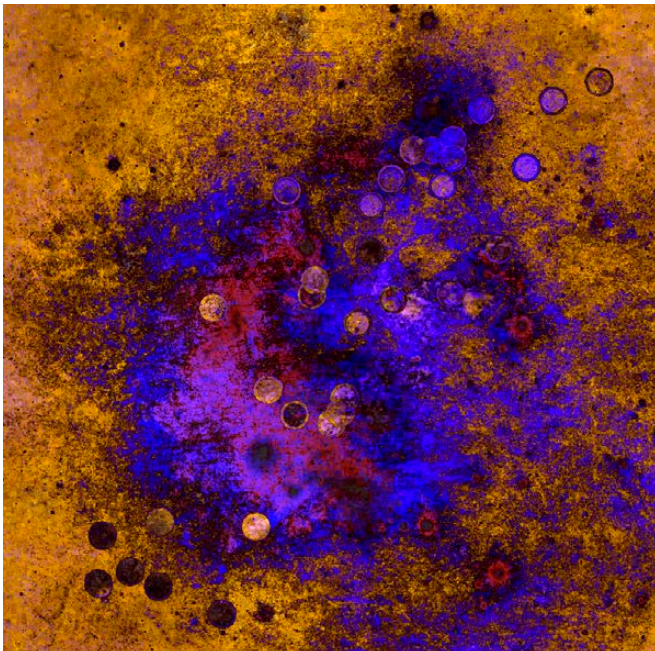
# A Powerful Intersection of Art and Climate Science

Text by Dr. Dominique Bachelet,  
Art by Alisa Singer

Visual artist Alisa Singer has combed through climate data ranging from models of sea level rise to CO<sub>2</sub> emissions to natural disaster frequency and transformed them into more than 75 pieces of striking digital artwork in a collection titled Environmental Graphiti®. Her piece “A Borrowed Planet - Inherited from our ancestors. On loan from our children” was recently featured as cover art on the [International Panel on Climate Change’s Sixth Assessment Report](#).

“Environmental Graphiti® is a series of digital paintings that builds a partnership between art and science. Seemingly abstract pieces are created from charts, graphs, maps, words or numbers reflecting key facts about climate change. The art draws people in and then, when they realize the image is not abstract, they become interested in learning more about the underlying science. The art makes the science more accessible. The science makes the art more meaningful. It’s a powerful combination.”

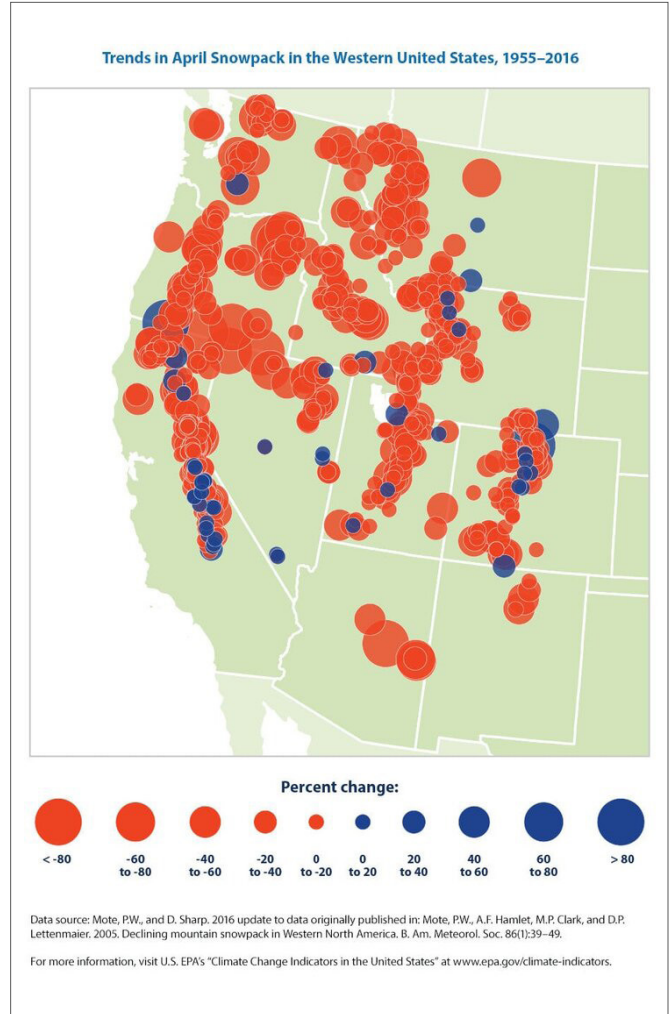
-Alisa Singer



The graph from Abatzoglou and Williams documents the close and evolving relationship between fuel dryness and forest fire area. It confirms that drought conditions caused by human-caused climate change are worsening and that one should fully expect this relationship to hold until the amount of forest fuel becomes limiting i.e. not enough biomass left to burn. Alisa Singer managed in her painting to illustrate the color of dried-up vegetation with browns and gold tones and the western forest area with blues, purple and even red reminiscent of fire flames. She uses the data points as stark reminders of the increasing fire risk in all western forests that scientists have been warning us about for the last 30+ years.

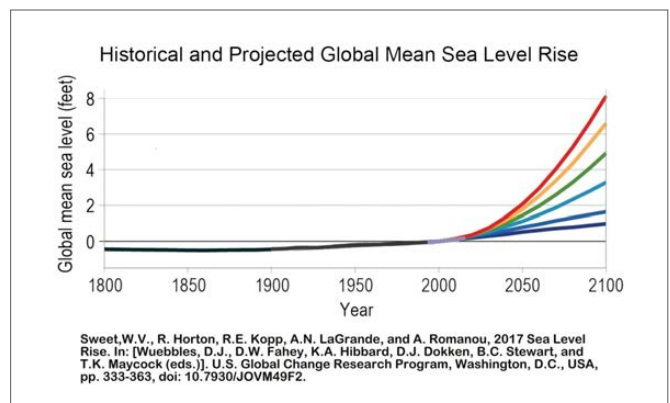


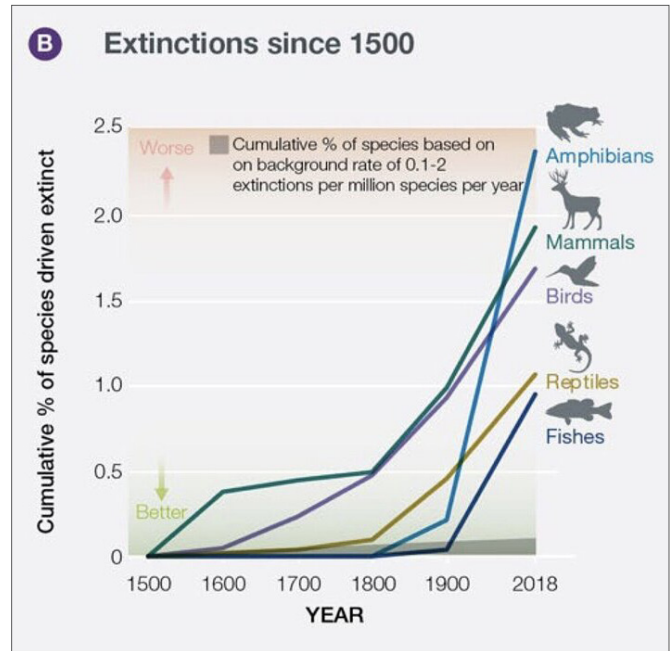
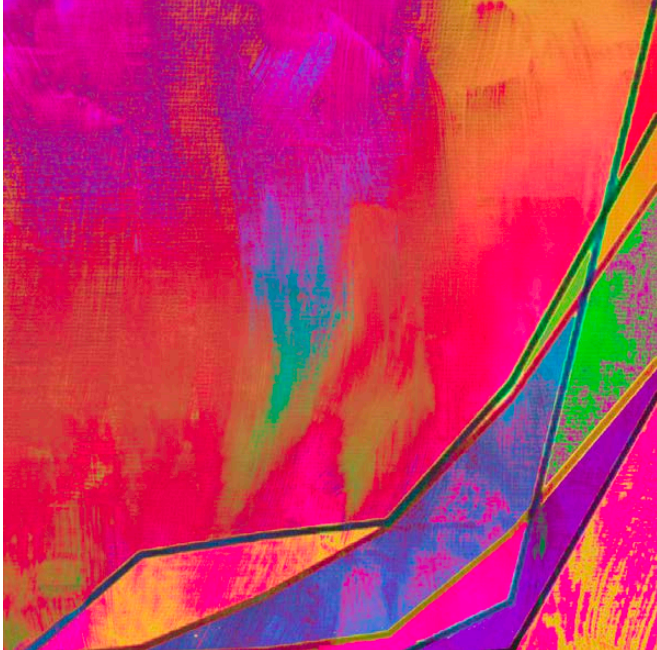
Mote and Sharp documented the magnitude of the ongoing decline in snowpack in western mountains. Alisa Singer uses blues that remind me of the rain that is now replacing the snow more often even at high elevation as well as brown and gold tones suggestive of warmth melting snow. She uses the data circles to conserve the overall shape of western states and emphasize the dire trend of snow loss using reds to stress the urgency and importance of this decline on both human societies and ecosystems at large.



I just love the beautiful and ominous center scene of the blue sky turning purple over a dark blue ocean lapping the even darker shoreline. Overhead one sees the warm and warmer hues of the future skies under climate change that causes ice sheets and glaciers to melt. And underneath we see yesterday's beaches with a cool cyan sea and a dry sandy beach which will not exist, at least in the same place, as sea level rise reduces the land area of our planet and redraws coastlines.

Alisa Singer uses the projections of future sea levels in a geometric design on the side of her painting to remind us of the real possibility of a very rapid change to a very different world.





In my mind, Alisa Singer screams with bright and shocking colors to raise the attention of the increasing role of climate change in exacerbating species extinction using the IPBS graph as a backbone of her geometric design. Be it through land use or overexploitation of land and oceans, we humans are responsible for killing many lives on this planet. Climate change is exacerbating what we have already started. While I personally believe many species will survive the chaos we have caused, it is certain that we have altered the dynamics of life on this planet. While mammals and birds (cooler color green) will likely be able to avoid some of the worst changes we caused by migrating across the fragmented landscape we have left them, less mobile species such as amphibians or reptiles will suffer more (red and purple). One hopes that fishes may be able to migrate also towards cooler deep water refugia. But the future could be dire for all. Our own species, due to our high vulnerability and much delayed response to a well-documented risk, may indeed also be at extreme risk of extinction.

To view the full gallery of Alisa's work please visit [environmentalgraphiti.org](http://environmentalgraphiti.org).