Policy Statement
The American Society of Landscape Architects believes climate change intensifies the negative impacts of development and puts ecosystems and communities at serious risk. Mitigation and adaptation require new paradigms that work with human and natural systems. Skillful, knowledge-based planning, design, and management contributes to addressing climate goals, including reduction of greenhouse gases, and significantly enhance resiliency in the face of extreme weather, sea-level rise, and shifting climatic patterns. Landscape architects have the responsibility to address these challenges in practice, advocacy, education, and research. As understanding of the effects and extent of these challenges grows, landscape architects should continue to respond with innovation and leadership. ASLA supports federal, state, and local policies that promote resilient and climate-smart design and planning; educate and empower communities; promote equity; promote active and multimodal transportation; protect natural systems; and support resilient agricultural practices.

Rationale
Extreme weather events, temperature rise, and other impacts of climate change disrupt communities and economies, threaten landscapes, and set in motion global shifts. As the ramifications of climate change increase, development, mass displacement of people and ecosystems, and population growth will place even more pressure on natural resources. Impaired natural systems, and the ecoservices they provide, endanger the health and well-being of society. Undeveloped, rural, suburban, and urban lands are significantly affected by changes in habitat, loss of biodiversity, agricultural instability, and disruption of natural processes.

Landscape architecture arose as a distinct profession to mitigate negative physical and social effects resulting from the Industrial Revolution and rapid urbanization. Past and current professional values and goals are based on ecological stability and human health, safety, and welfare. Landscape architects are uniquely educated and experienced to address climate change through resilient and sustainable design. Expertise in green infrastructure and integration of natural systems into the built environment are but two of many facets of practice that landscape architects use to create a more resilient society. Landscape architects’ proficiency in water management, coastal protection, landscape restoration and mitigation, urban design, regional planning, transportation, and other key areas provides a strong basis for ecologically based and societally equitable solutions.

Understanding and predicting the effects of climate change are beyond the realm of any single profession, mandating interdisciplinary analysis, research, and collaboration to advance development of new best practices. As communities grapple with the challenges of protecting the public and the built environment from the ramifications of climate change, there is a risk of too much reliance on gray infrastructure rather than a combination of gray and green infrastructure that works with natural systems. Landscape architects work with other disciplines to develop new approaches that help meet the goals of resiliency while maintaining and enhancing safe, livable, and vibrant communities and healthy ecosystems. Climate change impacts are all encompassing. Impacts of vital concern to the practice of landscape architecture include, but are not limited to:

- intensifying urban problems such as heat islands, public health issues due to weather, smog, and increasing need for more efficient water management;
changes in regional weather patterns and hazards (increased tornadoes, droughts, flooding, intense storms, etc);
changes in precipitation (seasonal patterns, intensity, amounts);
shoreline flooding, erosion, species changes, and increasing water levels—seacoast as well as freshwater lakes and waterways;
shifting flood zones affecting communities and individuals;
shifting of USDA plant zones, with concurrent new invasive plant species, pests, and diseases, creating challenges to biodiversity;
wildlife shifts and connectivity problems caused by development and changes in habitat;
significant impacts to agricultural lands, aquatic ecosystems, forests, and rural landscapes, including conservation lands and historic landscapes; and
depletion of the permafrost, an area covering 25 percent of the Northern Hemisphere alone

Landscape architects have the responsibility to apply their education and experience to protect natural ecosystems and social infrastructure through practice, advocacy, education, and research. Existing policies, codes, and practices may not be adequate for dealing with the effects of climate change, and thus need critical evaluation and revision at a global, national, state, and local level.

Resources
1. ASLA
   - Smart Policies for a Changing Climate: The Report and Recommendations of the ASLA Blue Ribbon Panel on Climate Change and Resilience, June 2018 [www.asla.org/climatepolicies](http://www.asla.org/climatepolicies)
   - American Society of Landscape Architects Stormwater Case Studies. [www.asla.org/stormwatercasestudies.aspx](http://www.asla.org/stormwatercasestudies.aspx)

2. Books
• Urbanism in the Age of Climate Change, Peter Calthrope. Island Press, 2010.

3. Articles: Rising Seas

4. Articles: Resilience and Adaptation

5. Articles: Environmental Justice
• “This is How We Can Tackle Climate Change, Even with a Denier in Chief,” Laurie Mazur, The Nation, December 12, 2016. www.thenation.com/article/this-is-how-we-can-tackle-climate-change-even-with-a-denier-in-chief

6. Articles: Climate Change and Health
• “Survey of County-Level Heat Preparedness and Response to the 2011 Summer Heat in 30 U.S. States,” Jalonne L. White-Newsome et al., Environmental Health Perspectives, June 2014.
• “Validating Satellite-Derived Land Surface Temperature with In Situ Measurements: A Public Health Perspective,” Jalonne L. White-Newsome et al., Environmental Health Perspectives, August 2013.

7. Reports: Coastal Resilience
• Buy-in for Buyouts: The Case for Managed Retreat from Flood Zones, a Policy Focus Report in collaboration with the Sonoran Institute, Lincoln Institute of Land Policy, 2016.

Bounce Forward: Urban Resilience in the Era of Climate Change, a Strategy Paper from Island Press and the Kresge Foundation
• Planning for Climate Change in the West, a Policy Focus Report on urban form and GHG mitigation, Lincoln Institute of Land Policy, 2010. www.lincolninst.edu

8. Video:
• An Inconvenient Sequel: Truth to Power, 2017 – Al Gore www.youtube.com/watch?v=FKww6xMTCc0
• An Inconvenient Truth, 2006 Al Gore www.youtube.com/watch?v=l-SV13UQXdk

9. Additional Information:
• Yale Environment 360 – Newsletter and articles Published at the Yale School of Forestry & Environmental Studies https://e360.yale.edu/
• Inside Climate News https://insideclimatenews.org/
• International Federation of Landscape Architects: Climate Change http://iflaoonline.org/professional-practice-and-policy/working-groups-and-task-forces/climate-change/
• The Landscape Performance Series by the Landscape Architecture Foundation  [https://www.landscapeperformance.org/](https://www.landscapeperformance.org/)