As the nearly 2,000-mile (3,200-kilometer) length of the U.S.-Mexican border, or as area known as the Borderlands, we are witness the expansion of the challenges of the 21st century. This circular identifies several challenge themes and issues associated with life and the environment in the Borderlands, which are located in the southwestern United States and northern Mexico. The United States and Mexico have a unique opportunity to work together to address these challenges and to contribute to the well-being of the region.

The Borderlands are a region of high biodiversity, with a diverse array of ecosystems and species. The region is also characterized by significant human activity, with a growing population and increased economic development. The challenges facing the Borderlands are complex and interconnected, and require a multidisciplinary approach to address.

Environmental Protection

The Borderlands are home to a high diversity of plant and animal life, and as the region continues to grow, it is important to protect these resources. The U.S. Geological Survey (USGS) is working with its counterparts, partners, and customers in both countries to address the environmental challenges facing the region.

Climate Change

Climate change is one of the most significant challenges facing the Borderlands. The region is at risk from the impacts of climate change, including increased temperatures, changes in precipitation patterns, and increased frequency and intensity of extreme weather events. The USGS is working to address these challenges through research and outreach.

Water Availability and Quality

Water is a critical resource in the Borderlands, and as the population grows, it is important to ensure that there is enough water to meet the needs of both people and ecosystems. The USGS is working to monitor and assess water availability and quality in the region.

Energy and Minerals Resources

The Borderlands are home to a range of energy and mineral resources, and as the region continues to grow, it is important to ensure that these resources are developed in a sustainable way. The USGS is working to assess and monitor energy and mineral resources in the region.

Environment and Human Health

The Borderlands are home to a diverse population, and as the region continues to grow, it is important to ensure that the environment is safe and healthy for all residents. The USGS is working to assess and monitor the environment and human health in the region.

Border Security and Environmental Protection

The Borderlands are a region of high security risk, and as the population grows, it is important to ensure that the region is safe and secure. The USGS is working with its counterparts, partners, and customers in both countries to address the security challenges facing the region.