Living in a Geologic Moment



If lifetimes were measured in eons rather than years, we would witness tremendous movement and change along the western edge of North America. The San Andreas fault, the boundary between the North American and Pacific plates, is part of a 30 million-year geologic story that is still unfolding.

20 million years ago Subducting Plate San Francisco Point Reyes Los Angeles

The first continental sliver that included Point Reyes broke off the landmass and joined the Pacific plate as it moved northwest.

Plate Boundary

Subuduction Zone



More of present-day Southern California was transferred to the Pacific plate and Point Reyes continued traveling northwest along the fault boundary.



Much of coastal California and Baja have now joined the Pacific plate. Point Reyes has traveled almost 300 miles along the San Andreas fault.



The plate boundary will likely shift inland east of the Sierras. The Gulf of California will expand and most of California will be transferred to the Pacific plate.

Plate Boundary

Subuduction Zone

Over millennia, the tectonic boundary has shifted inland as small pieces of the continent have joined the Pacific plate. Today, the San Andreas fault is the active plate boundary where relative movement between the plates averages two inches annually. In the future, the plate boundary will move inland east of the Sierras. As the process continues, North America will be radically altered.