

Seeking Additional Insights by Further Synthesis of the Miocene Stratigraphy and Structure of the East Bay Hills, California

Dr. Don Medwedeff, Northern California Geological Society

The 2021 NCGS Diablo Volume paper entitled “Miocene stratigraphy and structure of the East Bay Hills, California” is a dense trove of stratigraphic and structural information compiled by J. Ross Wagner and his coauthors over several decades. The paper documents in great detail lithologic and structural observations and age control provided by both fossil and geochemical methods. These data demonstrate that lithostratigraphic units are time transgressive and, at least locally, are structurally controlled. The authors present an interpretation that these variations result from both restraining and releasing bends connecting several faults including and between the Hayward and Calaveras-Franklin faults.

I will present preliminary material aimed at further synthesizing the data and analysis of Wagner et al. intended to eventually provide a basis for construction of cross sections that incorporate and are consistent with data and insights in the East Bay Hills.

Biography: Don Medwedeff received a PhD in Structural Geology from Princeton University in 1988. He then spent 30 years in the technology departments at ARCO and Chevron. Since retiring in 2017 he has been investigating the structural history of the Eastern Coast Ranges. Since 2020 he has been Treasurer of the NCGS.