

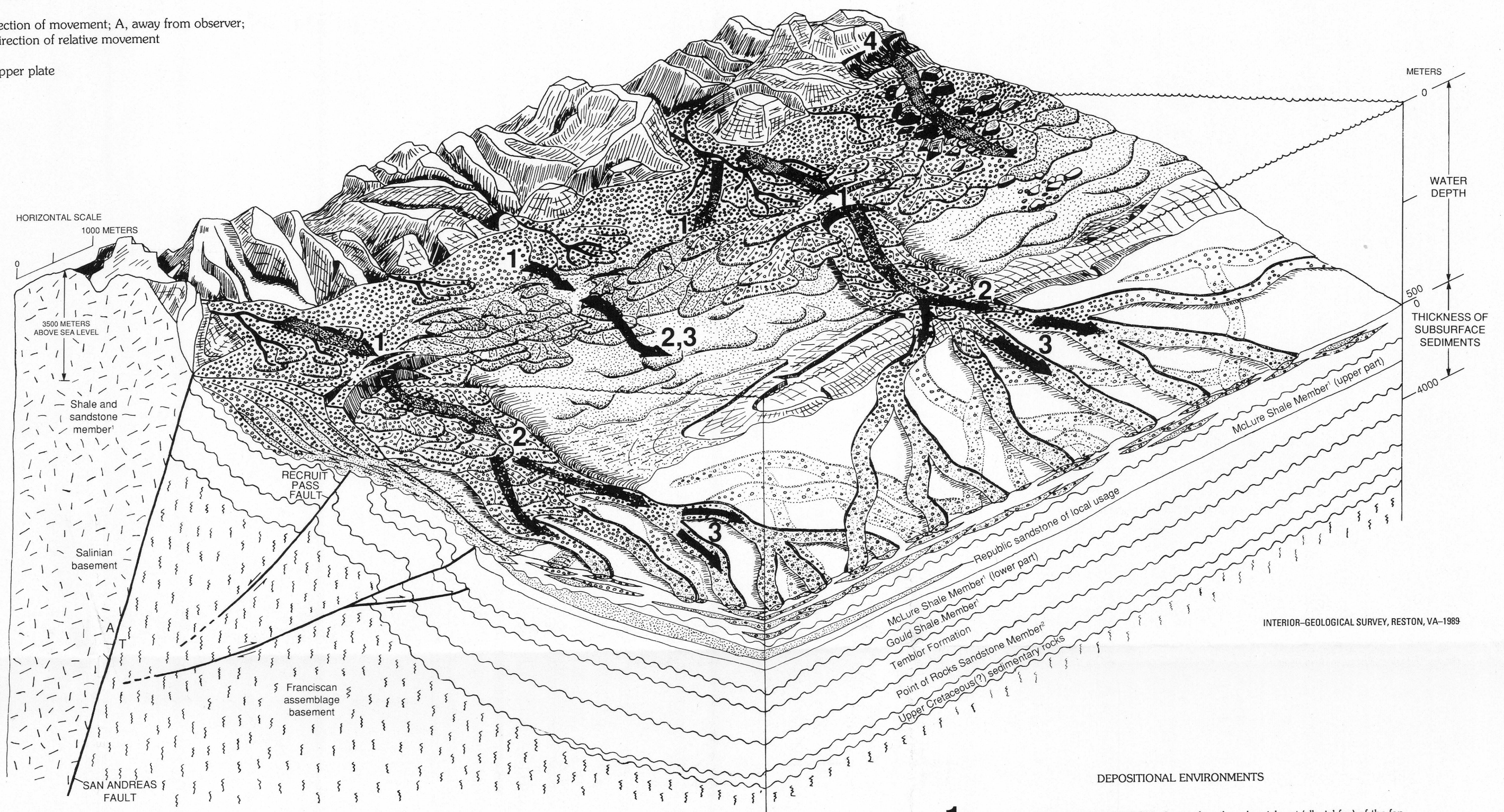
EXPLANATION

- CONGLOMERATE
 - CHANNEL—Pebble conglomerate and conglomeratic sandstone deposits
 - SANDSTONE
 - SILTY SANDSTONE
 - SHALE—Lithologically equivalent to the Republic and Williams sandstones of local usage and the Santa Margarita Formation, undivided
 - SHALE—Older than Republic and Williams sandstones of local usage and the Santa Margarita Formation
 - SCARP
 - MAJOR CONTACT BETWEEN FACIES
 - UNCONFORMITY
 - SEA LEVEL
 - DIRECTION OF SEDIMENT TRANSPORT
 - FAULT—In cross section showing direction of movement; A, away from observer; T, toward observer; arrows show direction of relative movement
 - SUBMARINE SLIDE—Sawteeth on upper plate
- 1 of Monterey Shale
2 of Kreyenhagen Formation

MAP A—REPUBLIC AND WILLIAMS SANDSTONES OF LOCAL USAGE (As indicated by vertical scales, water depth is greatly exaggerated to show detail of fan deltas and submarine fans)

DEPOSITIONAL ENVIRONMENTS

- 1 HIGH-CONCENTRATION TURBIDITY-CURRENT DEPOSIT—Located in principal valley or leveed channel on the upper fan. Organized pebbly sandstone units (Facies A). Fining- and thinning-upward sequences
- 2 HIGH-CONCENTRATION TURBIDITY-CURRENT/GRAIN-FLOW DEPOSIT—Located in suprafan channel on the mid-fan. Classical proximal turbidite units (Facies C) and massive sandstone units with or without dish structures (Facies B). Fining- and thinning-upward sequences
- 3 HIGH-CONCENTRATION TURBIDITY-CURRENT/GRAIN-FLOW DEPOSIT—Located on suprafan lobes on the mid-fan. Classical proximal turbidite units (Facies C) and massive sandstone units with or without dish structures (Facies B). Coarsening- and thickening-upward sequences



MAP B—SANTA MARGARITA FORMATION (As indicated by vertical scales, water depth is greatly exaggerated to show detail of fan deltas and submarine fans)

DEPOSITIONAL ENVIRONMENTS

- 1 SUBAERIAL DEBRIS-FLOW DEPOSIT—Located on the subaerial part (alluvial fan) of the fan delta. Poorly stratified, thick to very thick parallel-bedded and (or) massive conglomerate. Clasts are matrix supported. Approximately 35-50 percent detrital silt and clay in conglomerate matrix
- 2 SUBAQUEOUS DEBRIS-FLOW DEPOSIT—Located on the subaqueous part of the fan delta. Moderately stratified, thick to very thick parallel-bedded and (or) massive conglomerate and sandstone. Internally, most beds are either massive or normally graded (Facies A₁, A₂, A₃). Clasts are matrix supported. Approximately 15-35 percent detrital silt and clay in conglomerate matrix
- 3 HIGH-CONCENTRATION TURBIDITY-CURRENT DEPOSIT—Located on upper part of submarine fan. Moderately stratified, thick- and parallel-bedded pebble conglomerate, conglomeratic sandstone, and (or) sandstone. Internally, most beds are either massive or normally graded (Facies A₁, B, C). Pebble conglomerates are clast supported. Less than 15 percent detrital silt and clay in pebble conglomerate matrix
- 4 DEBRIS-AVALANCHE DEPOSIT—Located on the subaerial part of the fan delta (alluvial fan). Unstratified conglomerate and breccia containing very large boulders and blocks averaging several tens of meters in length. Clasts are matrix supported

SCHEMATIC RECONSTRUCTION OF DEPOSITIONAL ENVIRONMENTS, DEPOSITIONAL PROCESSES, AND PALEOTECTONIC SETTINGS OF THE REPUBLIC AND WILLIAMS SANDSTONES OF LOCAL USAGE AND THE SANTA MARGARITA FORMATION