



FIGURE 9.10. Effects of the 18 May 1980 eruption of Mt. St. Helens. (A) A map of the deposits. (B) Pyroclastic flows from Mt. St. Helens: upper flow with dual lobes deposited on 7 August 1980 (by flow shown in Figure 9.8A); lower flow (white) from 22 July 1980. United States Geological Survey photograph taken on 30 September 1980 by Lyn Topinka. The inset shows a close-up of the July flow front. United States Geological Survey photograph taken by Terry Leighley, Sandia Labs. (C) The valley of the river filled by a debris avalanche ($\sim 2.3 \text{ km}^3$) that comprised the pre-eruption north flank of the mountain. United States Geological Survey photograph by Lyn Topinka. (D) Pyroclastic (light) and avalanche (dark) debris in Spirit Lake. Holes are from melted ice blocks and steam explosions. From Schminke (2004). (E) Tree stumps blown off and covered by debris from lateral blast. From Schminke (2004).