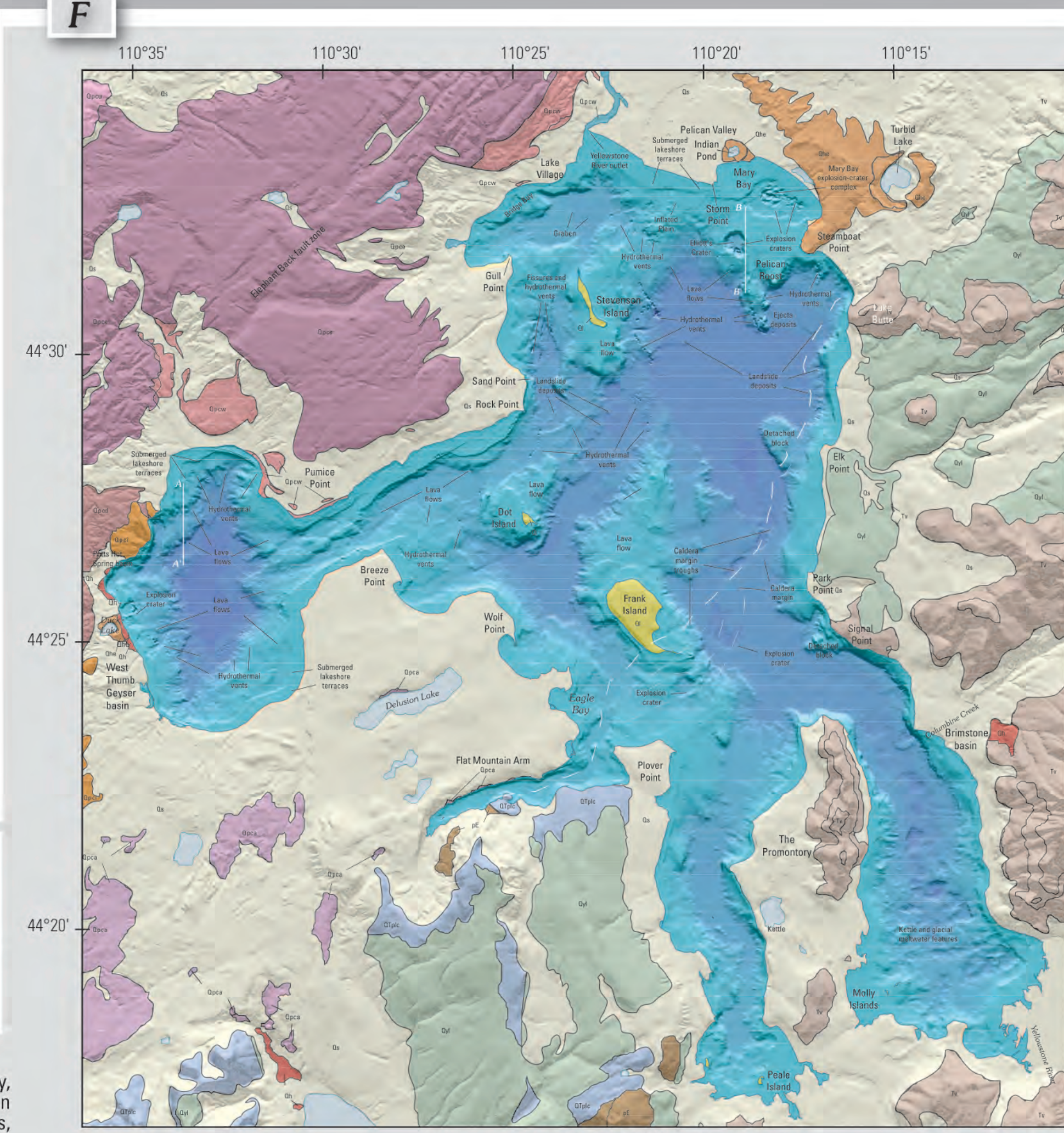
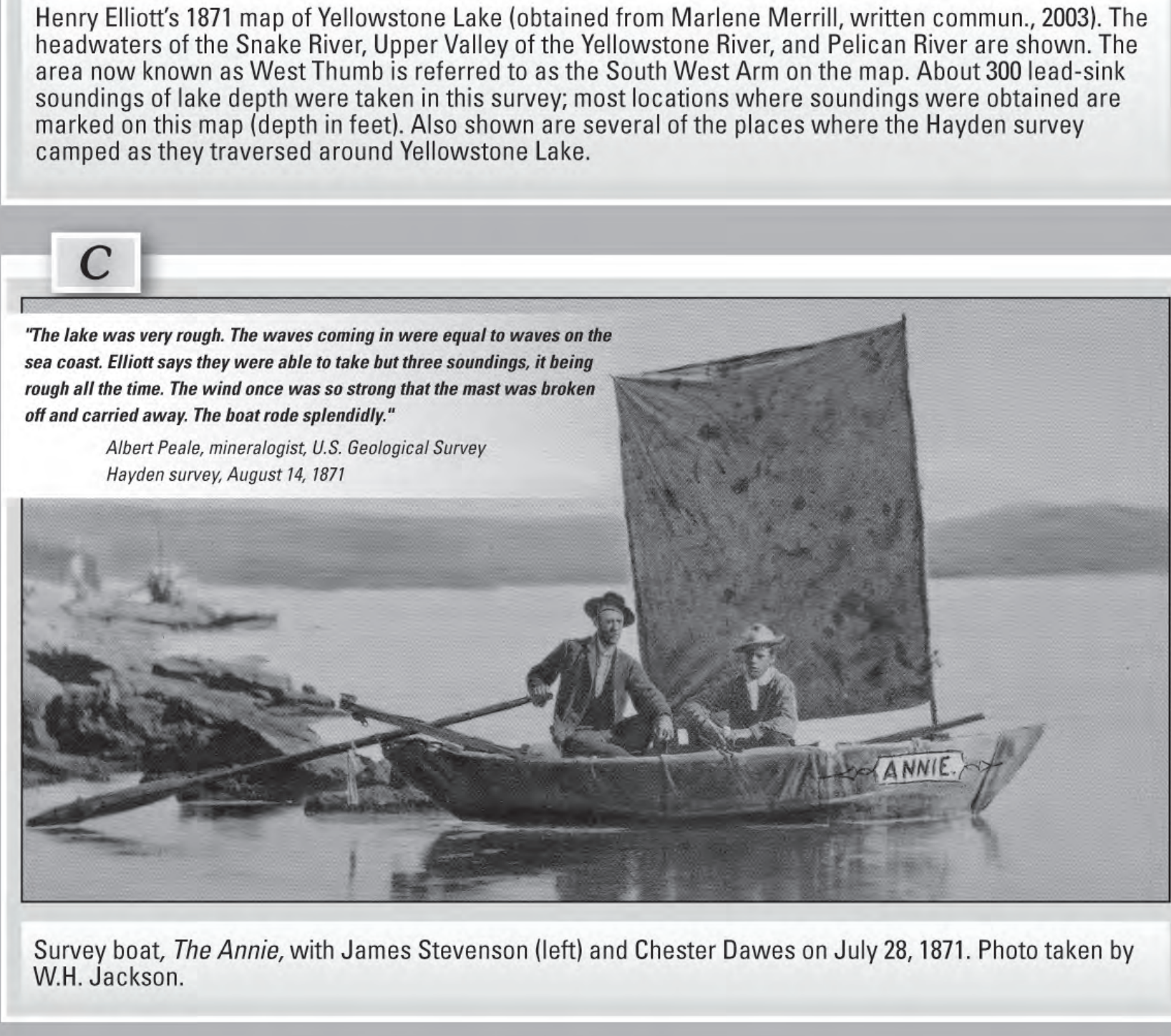
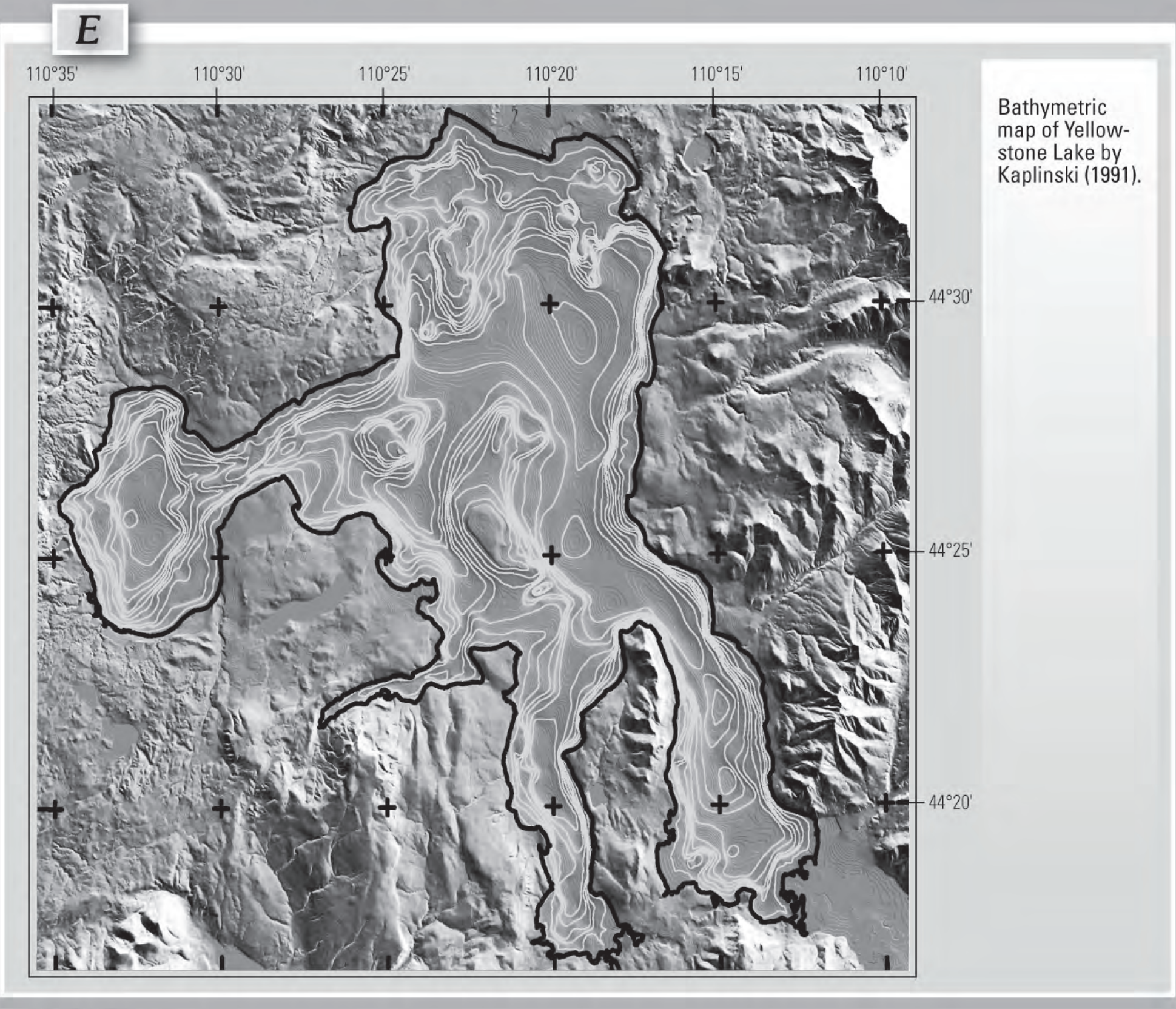
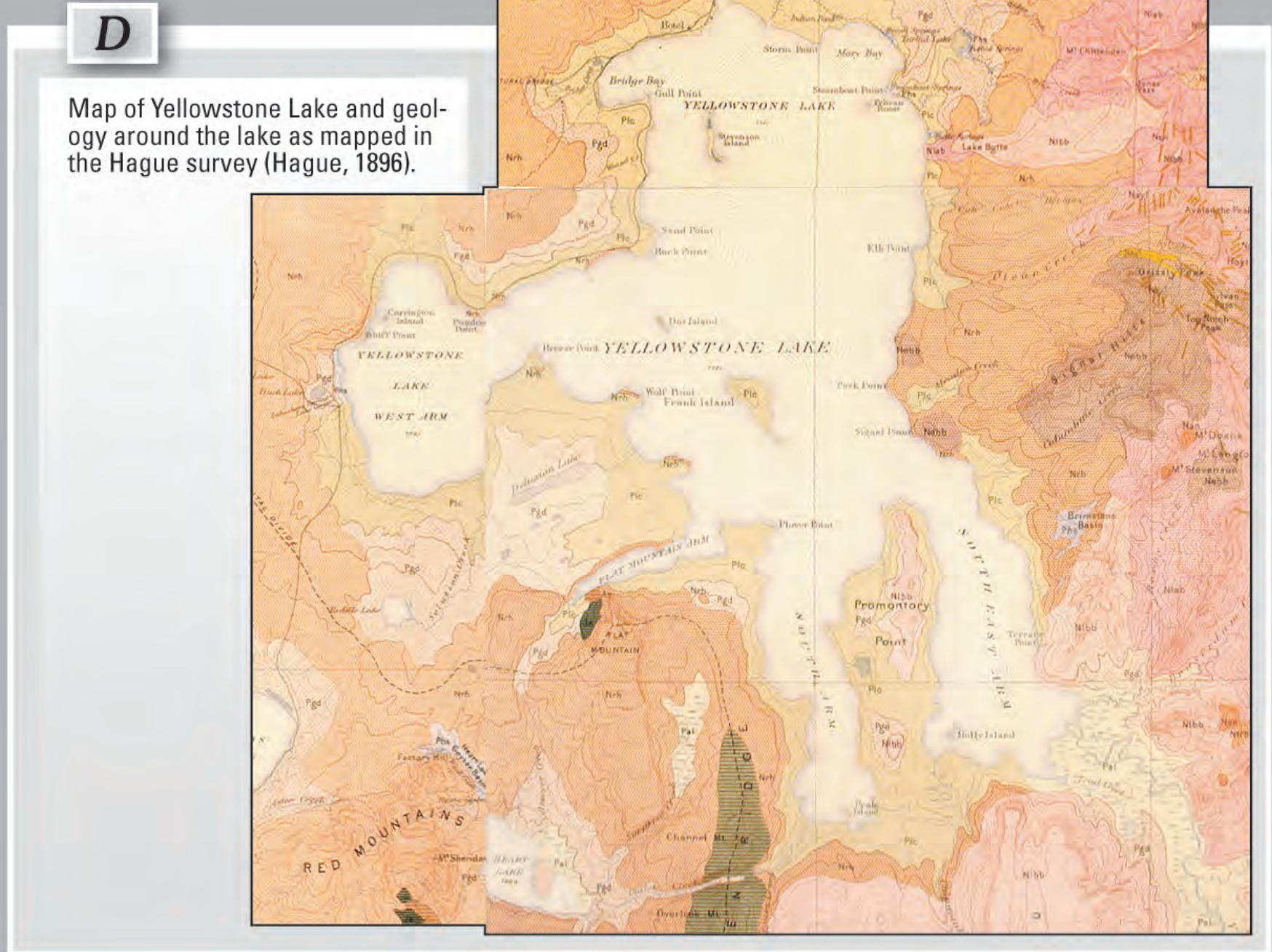
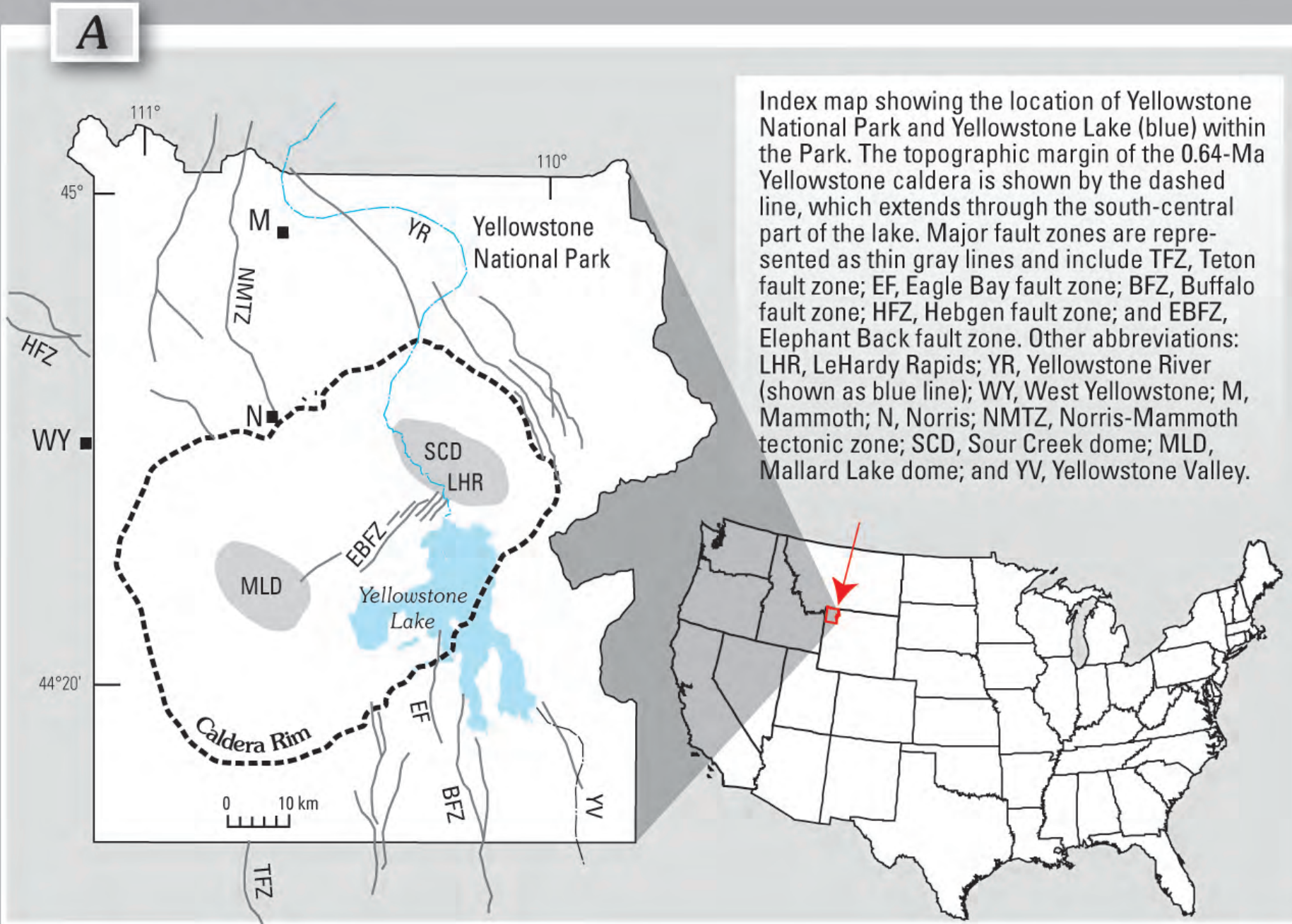


Series of Maps Showing the Evolution of Mapping Yellowstone Lake During the Past 130 Years, 1871–2002



EXPLANATION

Quaternary units	Older units	Water
Qs Sediments	Qpwc West Thumb rhyolite flow	Water
Qsl Shallow-lake sediments	Qpca Aster Creek rhyolite flow	Fractures, faults—Dashed where approximately located or inferred; dotted where concealed; ball and bar on downthrown side
Qhe Hydrothermal-explosion deposits	Qpcc Tuff of Bluff Point	
Qh Hydrothermal deposits	Qpcc Dry Creek rhyolite flow	
Qpca Lava Creek Tuff	Qpcc Lava Creek Tuff	
Qpca Elephant Back rhyolite flow	Tv Tertiary volcanic rocks, undifferentiated	
	pe Pre-Eocene rocks, undifferentiated	
	Qtpk Quaternary-Tertiary pre-Lava Creek Yellowstone Group rhyolites, undifferentiated	

The new map of the lake shows previously unknown features, such as an ~550-m-wide hydrothermal-explosion crater (east of Duck Lake); a 700-m-wide explosion crater south of Frank Island; and numerous hydrothermal vents, fissures, submerged lakeshore terraces, landslide deposits, and rhyolitic lava flows that underlie 7 to 10 m of postglacial sediments in West Thumb basin and others, 2003; Johnson and others, 2003; Otis and others, 1977). In the northern basin, large hydrothermal-explosion craters in Mary Bay and south-southeast of Storm Point, numerous smaller craters related to hydrothermal vents, landslide deposits along the eastern margin of the lake near the caldera margin (fig. 1), and postcaldera rhyolitic lava flows shape the lake basin. Glacial deposits (not shown in the northern basin in order to emphasize the postcaldera rhyolitic lava flows) are present throughout the lake and mantle the lava flows. Fissures west of Stevenson Island and the graben north of Stevenson Island may be related to extension along the young Eagle Bay fault (see fig. 1B).