FIGURE 5.20 Downstream view of the Salado River showing location of bedrock constriction (arrows) that caused short-lived damming of the river. Note trimline in jungle cover along lower left valley wall upstream of the river constriction. This trimline indicates the maximum height (about 10 m above current river level) to which the debris flood rose.

Before the 1987 earthquake, plans had been made by INECEL to construct a 60 to 70-m-high embankment dam at the above-mentioned constriction of the Coca River at Salado. This dam would have formed a reservoir to serve as the source of water for an underground penstock that would reenter the Coca River at a powerhouse downstream from San Rafael Falls (Figure 5.7). Fortunately, construction of this dam had not begun by the time of the 1987 earthquake, and the project was deferred after the quake. However, INECEL is again considering plans for a dam at this site (El Comercio, 1990). The new project would entail a 5-m-high embankment dam at the same site on the Coca River; this low-head dam would store water for the aforementioned penstock and power plant.

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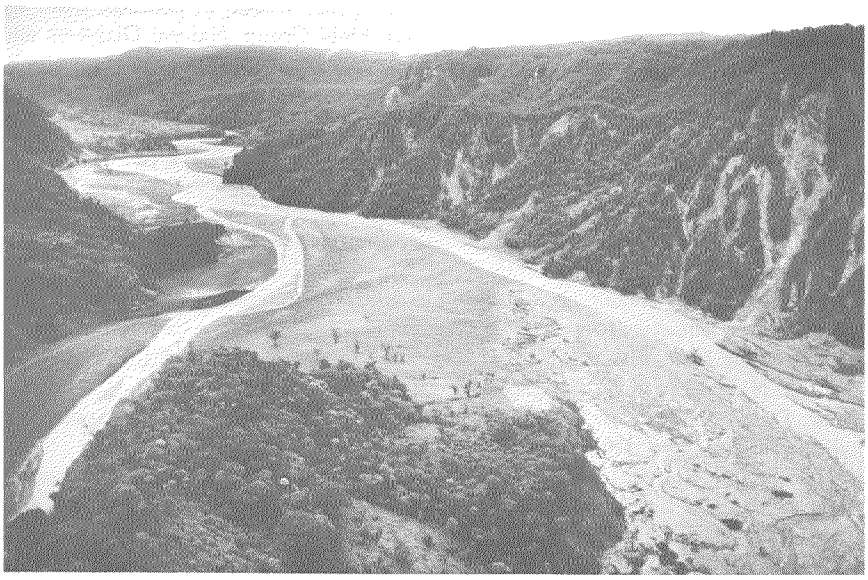

FIGURE 5.21 Looking downstream at the confluence of the Malo River (flowing from the lower left) with the Coca River. A debris flow issuing from the Malo River during the night of March 5, 1987, formed a short-lived dam of the Coca River, resulting in deposition of a large amount of sediment in the Coca channel in the right foreground.

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