To the west or left side of the line of water-parting the drainage flows into the Atlantic; to the east or right side it enters the North Sea. This line, it will be seen, runs irregularly across the course of the main hill ranges, just as the watershed of Europe, for example, from Gibraltar to St. Petersburg, sweeps in a widely-curving line athwart the chief mountain-chains. Owing to the comparative steepness of the west side of the island, the line keeps much closer to the Atlantic than to the North Sea. Hence by far the larger area of the country is drained into the latter basin. In the northern or Highland half of Scotland, no river of any notable size enters the Atlantic, while on the east side, the Spey, the Dee, the Don, the Tay, and a number of smaller, but still considerable, rivers carry the drainage of the mountains to the sea.

On the western side of the watershed, as it runs down Sutherland, Ross, and Inverness-shire from Cape Wrath to Loch Quoich, the transverse system of valleys is singularly well shown. Almost every great valley that enters the sea along that belt of country comes down from the southeast, and has its seaward portion filled by the tides of the Atlantic. The only marked exceptions are Lochs Keeshorn, Carron, and Alsh, which belong to the longitudinal or north-easterly system of valleys. In Loch Torridon there is an approximation to a union of the two series; for the long valley that comes across from Kinlochewe enters Upper Loch Torridon from the north east, and not until the mouth of that loch is reached does the fjord turn into the prevailing north-westerly course. So at the head of Loch Duich, the dark alpine defile of Glen Shiel opens from the south-east, while another glen comes down from the Bealloch of Kintail on the north-east, and the two valleys unite at a right angle to form Loch Duich.