This paper examines communicating geoscience to indigenous peoples using a communication model that closely follows geological models for pollution issues. Although geoscientists will expend large amounts of energy in understanding a scientific process, relatively little energy is often expended in the analogous communication model. Reasons for this include a narrow focus on pure science, lack of confidence in engaging in communication and negative perceptions of communication ideas. Indigenous peoples are defined as 'first occupiers' of regions or nations relatively untouched by the predominant 'Western–Asian' technological-oriented culture. Few indigenous peoples are totally 'untouched' by the dominant world culture. Four cases studies from the Solomon Islands explore communication strategies relating to land access, a live volcanic event, the setting up of a gold mine, and raising awareness of volcanic hazards. Generic best practice advice offered includes the following: understanding of indigenous culture, customs, values, taboos and political–governance structures; involvement of indigenous people at every level of the communication process; identifying and including all stakeholders; a clear message, method and outcome focus; usage wherever possible of face-to-face communication and pictures as well as words; involvement of the community in practical exercises; a thorough follow-up and evaluation process; and sufficient time to allow the process to be effective.