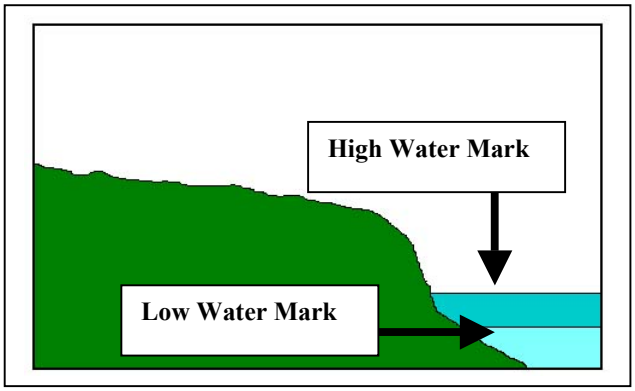
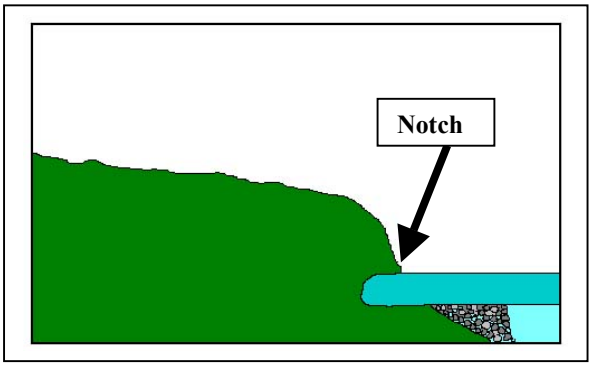
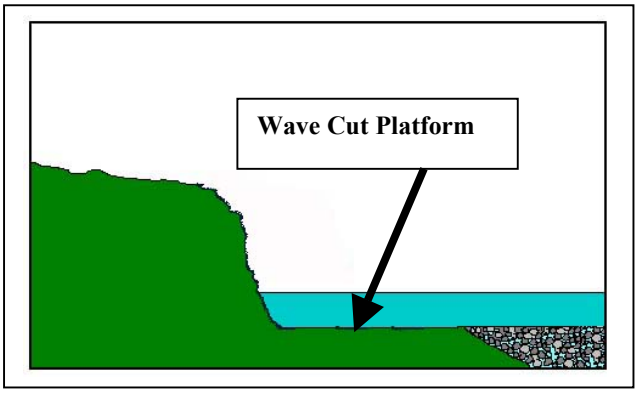
Wave Cut Platforms







Wave-cut platforms are wide, level areas of gently sloping exposed rock lying below a cliff. They extend to an area of rock debris which accumulates just below low-tide water level. Wave-cut platforms develop when high-energy waves erode a wave-cut notch in a cliff between high tide (High Water Mark) and low tide (Low Water Mark). Abrasion and hydraulic action combine to erode the base of a cliff. Abrasion is caused by stones, rock and other eroded debris being hurled against the cliff face by powerful waves. Hydraulic action is the sheer force of the water as it rushes against the cliff face. Undercutting of the base of the cliff undermines the cliff face and eventually causes it to collapse. Material eroded from the cliff is transported and deposited below the low water mark (low tide level). As the cliff retreats inland a gently sloping area of exposed rock remains at the cliff base and is exposed at low tide. Eroded rock debris continues to accumulate below the low water mark and attrition smoothens it. This debris increases the area of the platform. Over time, the increasing length of the platform reduces the erosive force of the incoming waves because they have a greater distance over which to travel. Eventually the cliff face will become stable and will no longer be eroded because the waves expend all their energy crossing the platform. Examples can be found in Kilkee County Clare.