

**Photo 4** Exotic forest site E1. Sediment taken from accumulation in culvert.



**Photo 5** Exotic forest site E2. Sediment taken from surface runoff drain in disused skidder pad.





**Photo 6** Exotic forest site E3. Sediment taken from the exposed drag line groove on a recent clear fell logging site.



**Photo 7** Harbour site H. Sediment taken from outer edge of mudflat on rising tide.



**Photo 8** Mangrove site M. Sediment scraped off surface beneath mangroves before tidal immersion of rising tide.





**Photo 9** General aerial view of catchment illustrating the difficulty in finding a pure land use type. (ARC photo).



**Photo 10** Aerial view of clear-fell logging operation within the Mahurangi catchment and the degree of bare earth exposure for erosion during rainfall events. (ARC photo).



**Photo 11** Deposition mechanism of fine terrigenous sediment ('clay') from erosion during rainfall events. (A) 'Clay' trapped in the freshwater film exists as a floating scum on the surface of the estuarine water until wave action breaks the scum and mixes it into the water column. (B) If the freshwater layer is not broken up, when the saline water recedes from beneath the freshwater over a shallow intertidal zone, the 'clay' scum is left behind as a discrete layer on the sediment surface. On exposure to the sun the 'clay' dries and loses the freshwater buoyancy, becoming more firmly bound into the sediment surface and thus resistant to resuspension on the next tidal cycle, unless there is wave action.

